ORDER NO.VM0403017C3

Service Manual

Digital Video Camcorder

MultiMediaCard™

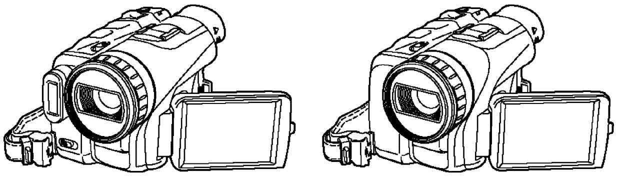
Panasonic Mini DV USB SD

NV-GS200GD / NV-GS120GD

A-MECHANISM

Color

(S)...... Silver Type



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SPECIFICATIONS

Digital Video Camera

ITEM	SPECIFICATION
POWER	Source: DC 7.9 / 7.2 V Consumption: Recording 3.9 W (When using Viewfinder)(NV-GS200) 4.4 W (When using LCD Monitor)(NV-GS200) 3.1 W (When using Viewfinder)(NV-GS120) 3.6 W (When using LCD Monitor)(NV-GS120)
RECORDING FORMAT	Mini DV (Consumer-use Digital Video SD Format)
TAPE USED	6.35 mm digital video tape
RECORDING / PLAYBACK TIME	SP mode: 80 min. with DVM80 LP mode: 120 min. with DVM80
CAMERA	Filter Diameter: 37.0 mm
	Zoom: 10:1 Power Zoom
	Monitor: 2.5-inch LCD
	Lens: Auto Iris, F1.8, Focal Length; 2.45 - 24.5 mm Macro (Full Range AF)
	Image Sensor: 1/6-inch CCD Image Sensor
	Viewfinder: Color Electronic Viewfinder
WEB CAMERA	Compression: Motion JPEG
	Image Size: 320 x 240 pixels (QVGA)
VIDEO	Recording System: Digital Component
	Television System: EIA Standard; 525 Lines, 60 Fields NTSC Color Signal
	Video Output Level: 1.0 Vp-p, 75 ohm S-Video Output Level: Y Output; 1.0 Vp-p, 75 ohm C Output; 0.3 Vp-p, 75 ohm Video Input Level: 1.0 Vp-p, 75 ohm S-Video Input Level: Y Input; 1.0 Vp-p, 75 ohm C Input; 0.3 Vp-p, 75 ohm
AUDIO	Recording System: PCM Digital Recording 16 bit (48 kHz/2 ch) 12 bit (32 kHz/4 ch)
	Audio Output Level (Line): 316 mV, 600 ohm Audio Input Level (Line): 316 mV, 10 kohm or more Mic Input: Mic sensitivity -50dB(0dB=1V/Pa,1kHz) (Stereo Mini Jack)
CARD MEMORY FUNCTIONS	Recording Media: SD Memory Card, MultiMediaCard Image Compression: JPEG Video Compression: MPEG4(NV-GS200 only) MPEG Image size(NV-GS200 only): SUPERFINE: 320 x 240 pixels (QVGA) FINE: 320 x 240 pixels (QVGA) NORMAL: 176 x 144 pixels (QCIF) ECONOMY: 176 x 144 pixels (QCIF)

ITEM	SPECIFICATION
CARD MEMORY FUNCTIONS	Sound Compression: G.726 (NV-GS200 only) Still Image Size: Mega-pixel Recording; 1760 x 1320 (2.3 million pixels)(NV-GS200) 1280 x 960 (1.2 million pixels)(NV-GS120) VGA Recording; 640 X 480
STANDARD ILLUMINATION	1,400 lx
MINIMUM REQUIRED ILLUMINATION	1 lx (Color Night View Mode)
USB	Card reader / writer function, USB 2.0 compliant (maximum 12Mbps) No copyright protection support / Mini System editing terminal / Pict Bridge compliant
DIGITAL INTERFACE	DV Input/Output Terminal (IEEE1394, 4-pin)
VIDEO FLASH	GN 5.5 (NV-GS200 only)
MICROPHONE	Stereo
SPEAKER	1 round speaker ϕ20 mm
OPERATING TEMPERATURE	0 - 40 °C
OPERATING HUMIDITY	10 - 80 %
WEIGHT	Approx. 470 g (without Battery, DV cassette and lens cap) (NV-GS200) Approx. 570 g (with CGA-DU14, DVM60 and lens cap) (NV-GS200) Approx. 450 g (without Battery, DV cassette and lens cap) (NV-GS120) Approx. 550 g (with CGA-DU07, DVM60 and lens cap) (NV-GS120)
DIMENSIONS	Approx. 70 (W) x 75 (H) x 126 (D) mm
STANDARD ACCESSORIES	1 pc. AC Adaptor 1 pc. Battery Pack Unit 1 pc. DC Cable 1 pc. AC Cord 1 pc. AV Cable 1 pc. Remote Controller 1 pc. Bottom-type Battery 1 pc. Hood Cap Unit 1 pc. Driver Soft 1 pc. USB Connection Cable 1 pc. SD Card 1 pc. Shoulder Belt 1 pc. Universal Remote Controller
SOLDER	This model use lead free solder (PbF).

Weight and dimensions are approximate values.
Specifications may change without prior notice.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. INTRODUCTION

1.1. INTRODUCTION

This service manual contains technical information which will allow service personnel's to understand and service this model.Please place orders using the parts list and not the drawing reference numbers. If the circuit is changed or modified, this information will be followed by supplement service manual to be filed with original service manual.

Note 1:
These movie camera uses AC Adaptor is VSK0652.

1.2. FEATURE COMPARISON CHART

FUNCTION	GS200	GS120
Image Sensor Total Pixels	800Kx3	540Kx3
Still Picture Size (Mega-Pixel Recording)	1760x1320 (2.3 milliion pixels)	1280x960 (1.2 milliion pixels)
Video Compression	MPEG4	-
Video Flash	○ (GN5.5)	-
Standard Accessories	Free Style Remote Controller	-

1.3. ABOUT LEAD FREE SOLDER (PbF)

Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF stamp or printing on the PCB. (Please refer to figures.)

M1248
W124
MTWTFSS
PbF
W6403
ASSY.NO.LSEP2063 A

Printed case

PbF
ASSY.NO.LSEP2012

Stamped case

CAUTION:

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 °F - 70 °F (30 °C - 40 °C) higher. Please use a soldering iron with temperature control and adjust it to 700 °F±20 °F (370 °C± 10 °C). In case of using high temperature soldering iron, please be carefull not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100 °F/600 °C).
- All products with the printed circuit board with PbF stamp or printing must be serviced with lead free solder. When soldering or unsoldering, completely remove all of the solder from the pins or solder area, and be sure to heat the soldering points with the lead free solder until it melts sufficiently.

Recommendations

Recommended lead free solder composition is Sn96.5 Ag3.0 Cu0.5.

2. SAFETY PRECAUTIONS

2.1. GENERAL GUIDELINES

1. **IMPORTANT SAFETY NOTICE / There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Layout, Exploded Views and Replacement Parts List.It is essential that these critical parts should be replaced with manufacturer’s specified parts to prevent X-RADIATION, shock fire, or other hazards. Do not modify the original design without permission of manufacturer.**
2. **An Isolation Transformer should always be used during the servicing of AC Adaptor whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injuryfrom electrical shocks. It will also protect AC Adaptor from being damaged by accidental shorting that may occur during servicing.**
3. **When servicing, observe the original lead dress. It a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.**
4. **After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.**

5. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

2.2. LEAKAGE CURRENT COLD CHECK

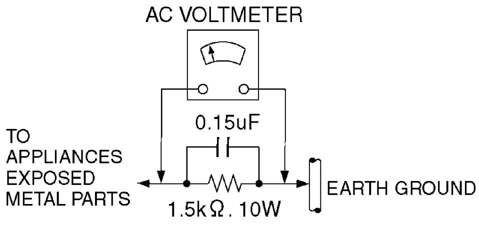
1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis,the reading should be between 1M Ω and 5.2M Ω . When the exposed metal does not have a return path to the chassis, the reading must be infinity.

2.3. LEAKAGE CURRENT HOT CHECK (See Figure. 1)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5 k Ω , 10 W resistor, in parallel with a 0.15 μ F capacitor, between each exposed metallic part on the set and a good earth ground, as shown in Figure. 1
3. Use an AC voltmeter, with 1 k Ω /V or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 V RMS.
   A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 mA. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, andthe equipment should be repaired and rechecked before it is returned to the customer.

Figure. 1

Hot-Check Circuit



3. PREVENTION OF ELECTRO STATIC DISCHARGE (ESD) TO ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistorsand semiconductor “chip” components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. **Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, whichshould be removed for potential shock reasons prior to applying power to the unit under test.**
2. **After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.**
3. **Use only a grounded-tip soldering iron to solder or unsolder ES devices.**
4. **Use only an antistatic solder removal device. Some solder removal devices not classified as “antistatic (ESD protected)” can generate electrical charge sufficient to damage ES devices.**
5. **Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.**
6. **Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparableconductive material).**
7. **Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis**

or circuit assembly into which the device will be installed.

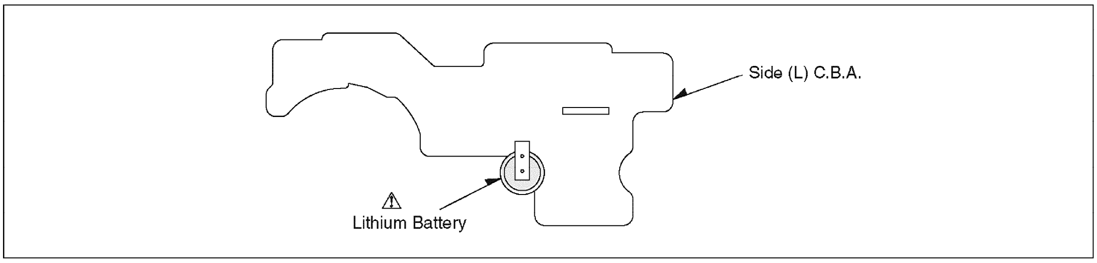
CAUTION:
Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. **Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD)sufficient to damage an ES device).**

4. HOW TO REPLACE THE LITHIUM BATTERY (PROCEDURE)

1. **Remove the Side Case (L) C.B.A.. (Refer to Disassembly Procedures.)**
2. **Unsolder the Lithium Battery “ML-921S/F9D” and then replace the new one. (See Fig. B1.)**
3. **Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.**

Fig. B1



Note:
The lithium battery is a critical component. (Type No.: ML-921S/F9D Manufactured by Panasonic.)
It must never be subjected to excessive heat or discharge.
It must therefore only be fitted in equipment designed specifically for its use.
Replacement batteries must be of the same type and manufacture.
They must be fitted in the same manner and location as the original battery, with the correct polarity contacts observed.
Do not attempt to re-charge the old battery or re-use it for any other purpose.
It should be disposed of in waste products destined for burial rather than incineration.

5. ADJUSTMENT PROCEDURES

5.1. DISASSEMBLE FLOW CHART

This flow chart indicates the disassembly steps the cabinet parts, C.B.A. and Mecha. Unit in order to access to be serviced. When reinstalling, perform the steps in the reverse order.

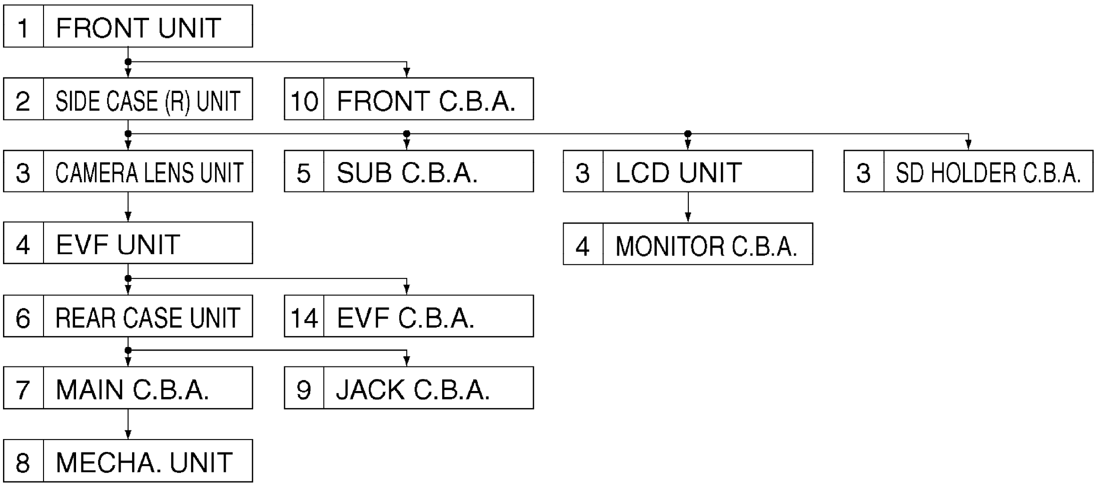
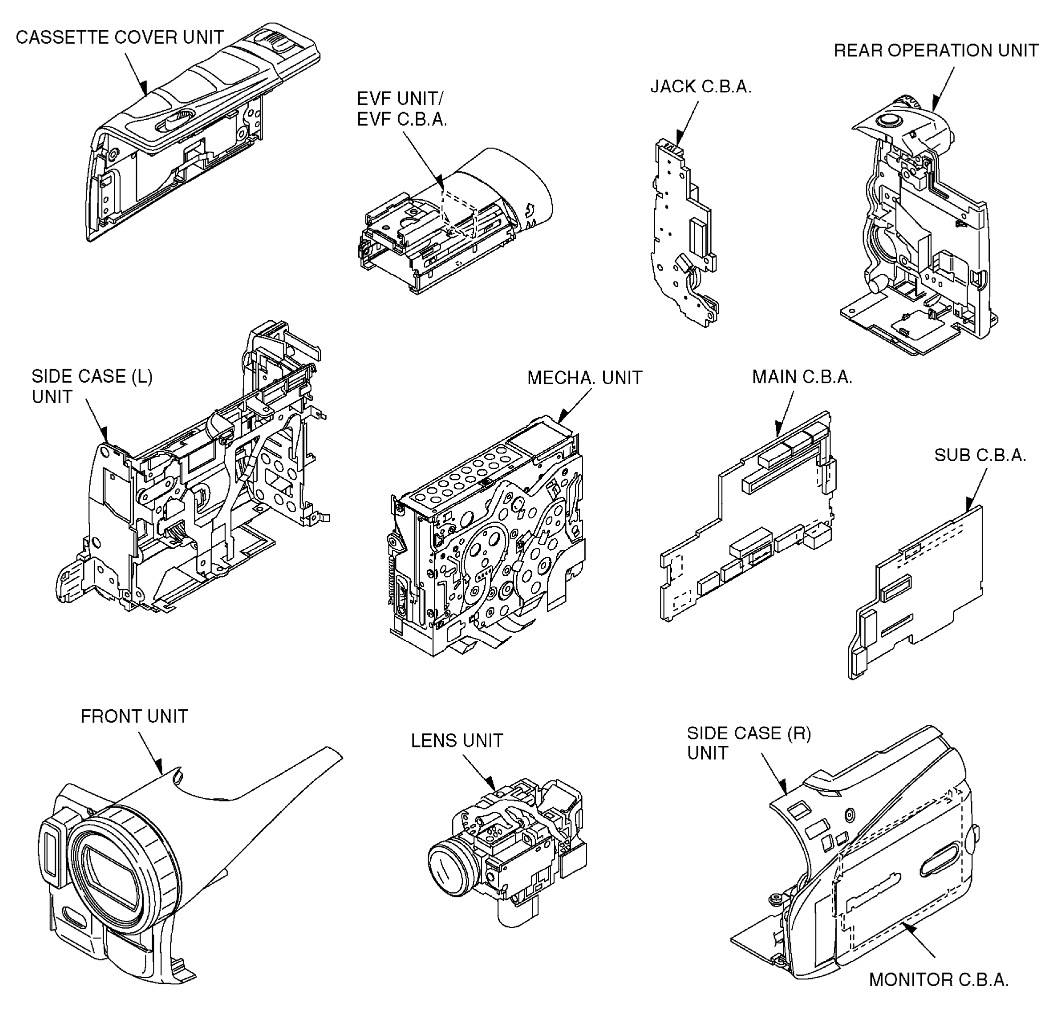

1 FRONT UNIT
2 SIDE CASE (R) UNIT
10 FRONT C.B.A.
3 CAMERA LENS UNIT
5 SUB C.B.A.
3 LCD UNIT
3 SD HOLDER C.B.A.
4 EVF UNIT
4 MONITOR C.B.A.
6 REAR CASE UNIT
14 EVF C.B.A.
7 MAIN C.B.A.
9 JACK C.B.A.
8 MECHA. UNIT

Fig. F1


CASSETTE COVER UNIT
EVF UNIT/
EVF C.B.A.
JACK C.B.A.
REAR OPERATION UNIT
SIDE CASE (L)
UNIT
MECHA. UNIT
MAIN C.B.A.
SUB C.B.A.
FRONT UNIT
LENS UNIT
SIDE CASE (R)
UNIT
MONITOR C.B.A.

5.2. DISASSEMBLY PROCEDURES

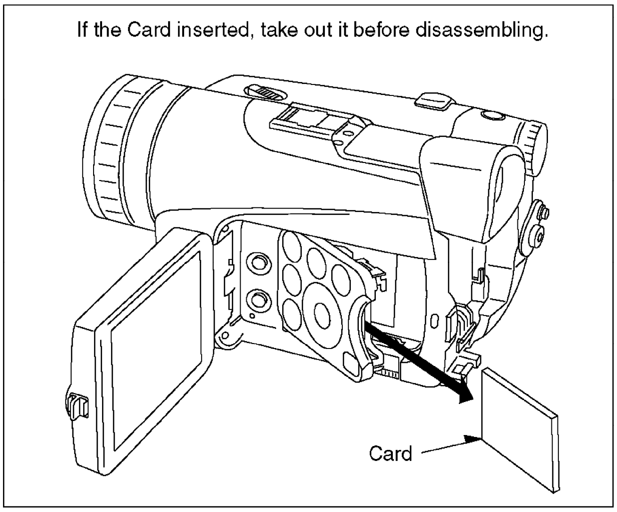
Flow-Chart for Disassembly Procedure

No.	Item / Part	Fig.	Removal (Screw,Connector,Flex. & Other)
1	Front Unit	Fig. D2	2-Screws (A), 1-Screw (B) Remove Grip Belt Piece.
		Fig. D3	1-Screw (C), 1-Screw (D), 1-Screw (E)
		Fig. D4	1-Connector FP4801 Front Unit
2	Side Case (R) Unit	Fig. D5	1-Screw (F), 2-Screws (G)
		Fig. D6	1-Screw (H) 3-Connectors FP601, FP3401, FP6503 Side Case (R) Unit
3	Camera Lens Unit	Fig. D7	1-Screw (I) 2-Connectors FP701,PS201 Camera Lens Unit
4	EVF Unit	Fig. D8	1-Screw (J)
		Fig. D99	1-Screw (K) 2-Connectors FP603,FP3402 EVF Unit
5	Sub C.B.A.	Fig. D10	2-Connectors FP4002,PS3001 Sub C.B.A.
6	Rear Case Unit	Fig. D11	1-Screw (L), 1-Screw (M), 1-Screw (N) 2-Connectors FP1001,FP6502 Rear Case Unit
7	Main C.B.A.	Fig. D12	8-Connectors FP2201,FP2202,FP2203,FP2204, FP5001, FP6501,FP6504,FP6505 1-Screw (O) Remove <b> Main C.B.A.
8	Mecha. Unit	Fig. D13	3-Screws (P) Mecha. Unit
9	Jack C.B.A.	Fig. D14	2-Screws (Q), 1-Screw (R) Jack C.B.A.

No.	Item / Part	Fig.	Removal (Screw,Connector,Flex. & Other)
10	Front C.B.A.	Fig. D15	<GS200> 2-Screws (S), 1-Screw (T), 1-Screw (U) 2-Connectors FP7001,FP7002 Front C.B.A./Flash SW C.B.A. <GS120> 3-Screws (S) FrontC.B.A.
11	LCD Unit	Fig. D16	1-Screw (V)
		Fig. D17	3-Screws (W) Rear Cover
		Fig. D18	2-Screws (X) LCD Unit
12	Monitor C.B.A.	Fig. D19	2-Screws (Y) 6-Tabs 1-Connector FP904 LCD Case (Upper)
		Fig. D20	1-Connector FP901 Monitor C.B.A.
13	SD Holder C.B.A.	Fig. D21	1-Screw (Z), 1-Screw (a) 1-Connector FP6601 4-Tabs SD Holder Unit *Paying attention to SD opening SW in the case of, assembling the SD holder unit is installed, in thecondition where opened the SD door.
		Fig. D22	1-Screw (b) SD Door Unit
		Fig. D23	SD Slide Link/SD Holder
		Fig. D24	SD Support Plate Unit/SD Door Spring/SD Slide Cover
		Fig. D25	SD Holder C.B.A.

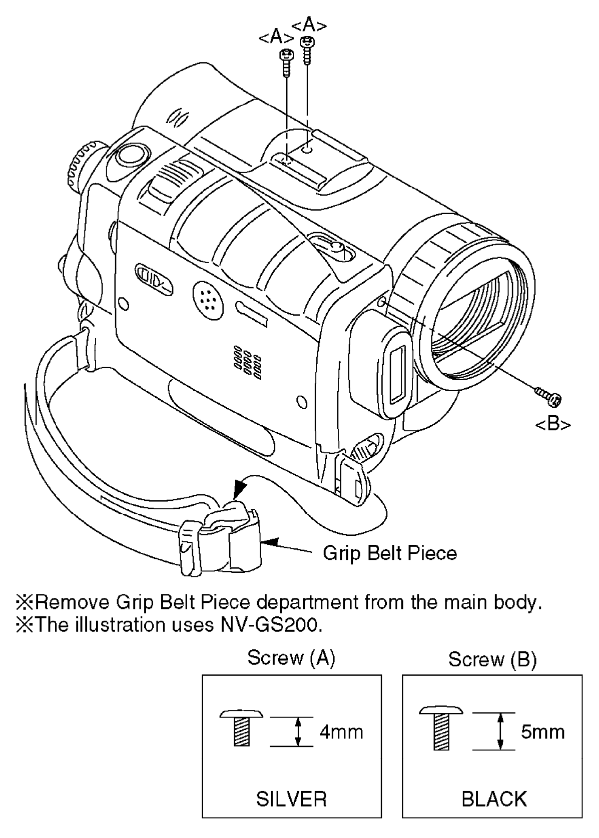
No.	Item / Part	Fig.	Removal (Screw,Connector,Flex. & Other)
14	**EVF C.B.A.**	Fig. D26	**Tape**
		Fig. D27	**4-Screws (c)** **EVF UNIT (1)**
		Fig. D28	**2-Screws (d)** **EVF Hinge**
		Fig. D29	**Pushing A department I remove the View ADJ. Unit.**
		Fig. D30	**Remove a,b,c,d department (remove a, b department previously)** **EVF Case (Upper)** **Remove e,f department** **EVF LCD Unit**
		Fig. D31	**2-Connectors FP801,FP802** **Remove g,h department** **EVF C.B.A.**

Fig. D1



If the Card inserted, take out it before disassembling.

Fig. D2


<A>
<A>
<B>
Grip Belt Piece
Screw (A)
4mm
SILVER
Screw (B)
5mm
BLACK

※Remove Grip Belt Piece department from the main body.
※The illustration uses NV-GS200.

Fig. D3

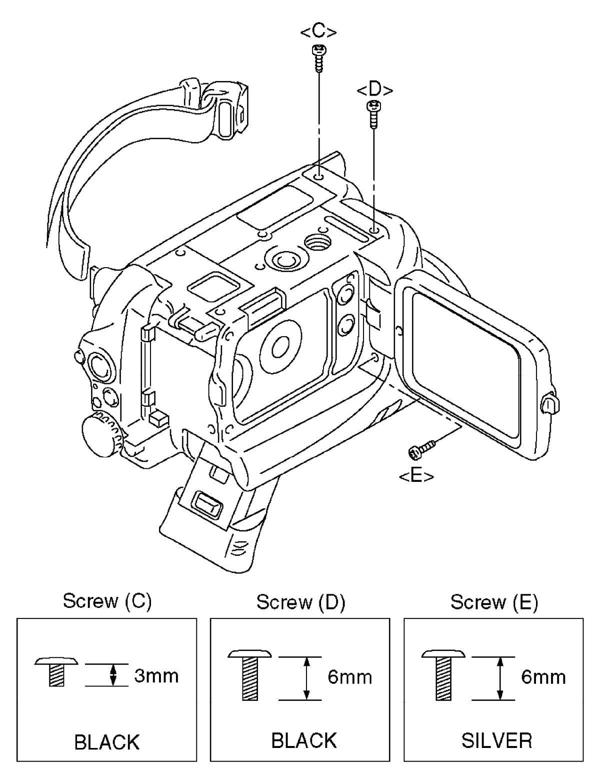

<C>
<D>
<E>
Screw (C)
3mm
BLACK
Screw (D)
6mm
BLACK
Screw (E)
6mm
SILVER

Fig. D4

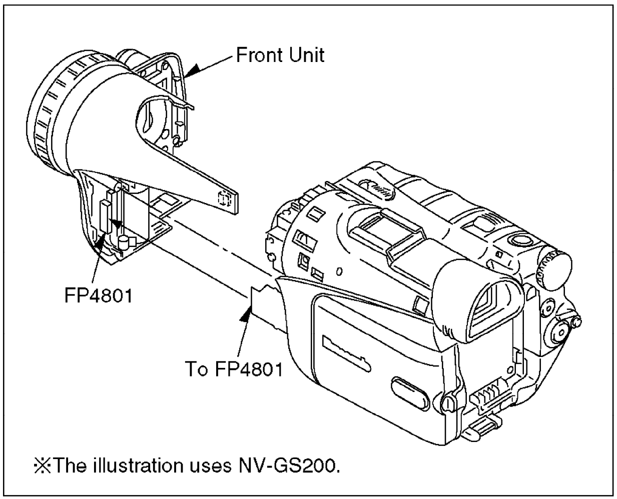

Front Unit
FP4801
To FP4801
※The illustration uses NV-GS200.

Fig. D5

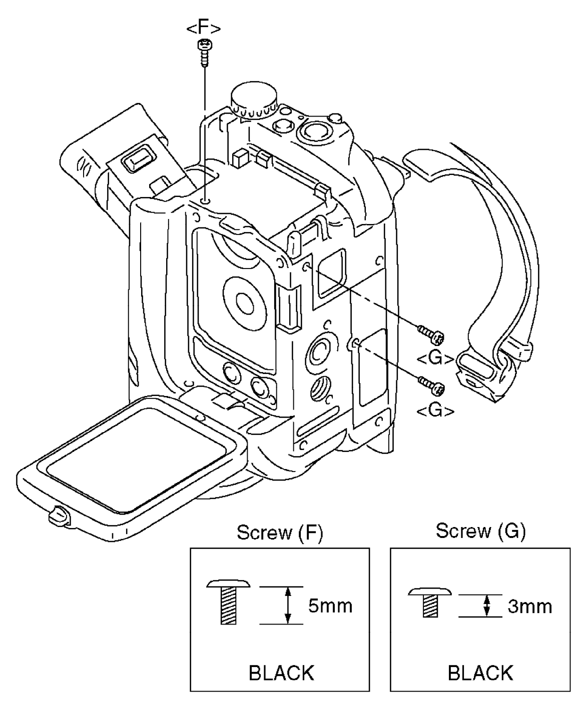

<F>
<G>
<G>
Screw (F)
5mm
BLACK
Screw (G)
3mm
BLACK

Fig. D6

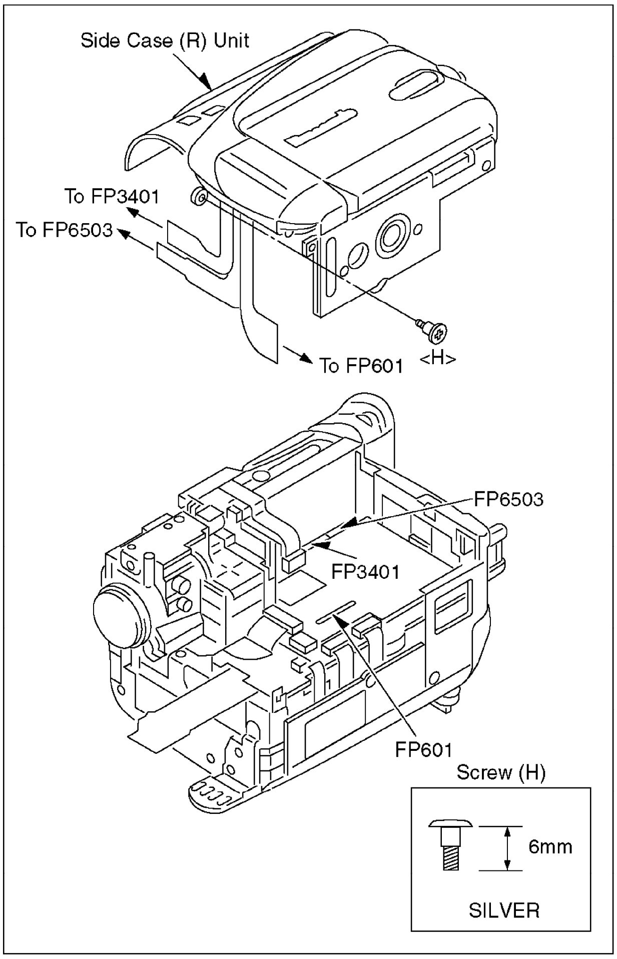

Side Case (R) Unit
To FP3401
To FP6503
To FP601
<H>
FP6503
FP3401
FP601
Screw (H)
6mm
SILVER

Fig. D7

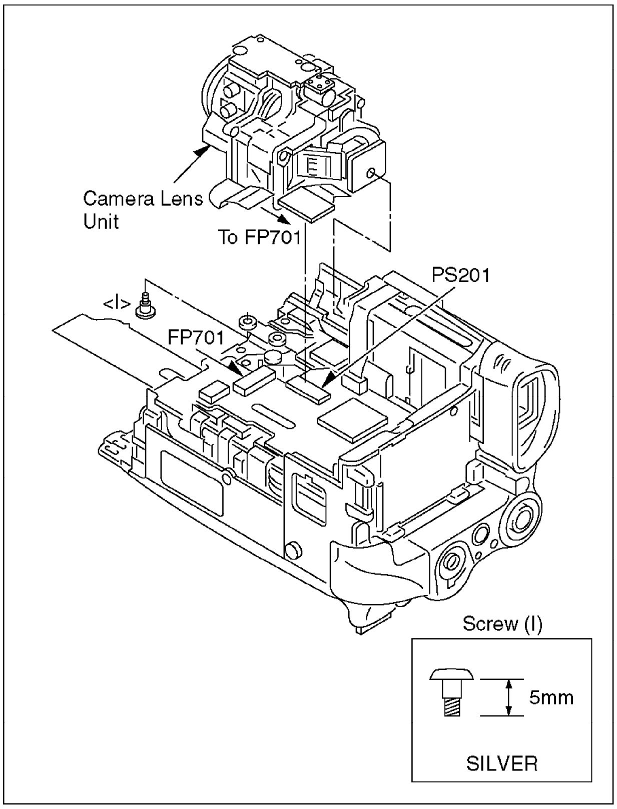

Camera Lens
Unit
To FP701
PS201
<I>
FP701
Screw (I)
5mm
SILVER

Fig. D8

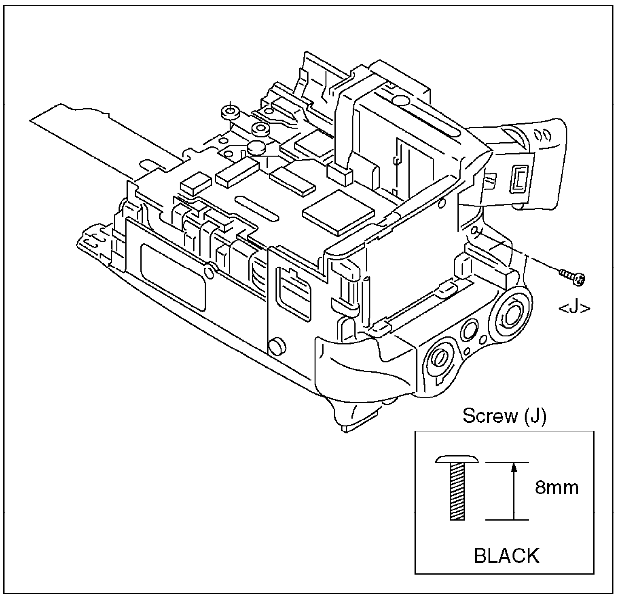

<J>
Screw (J)
8mm
BLACK

Fig. D9

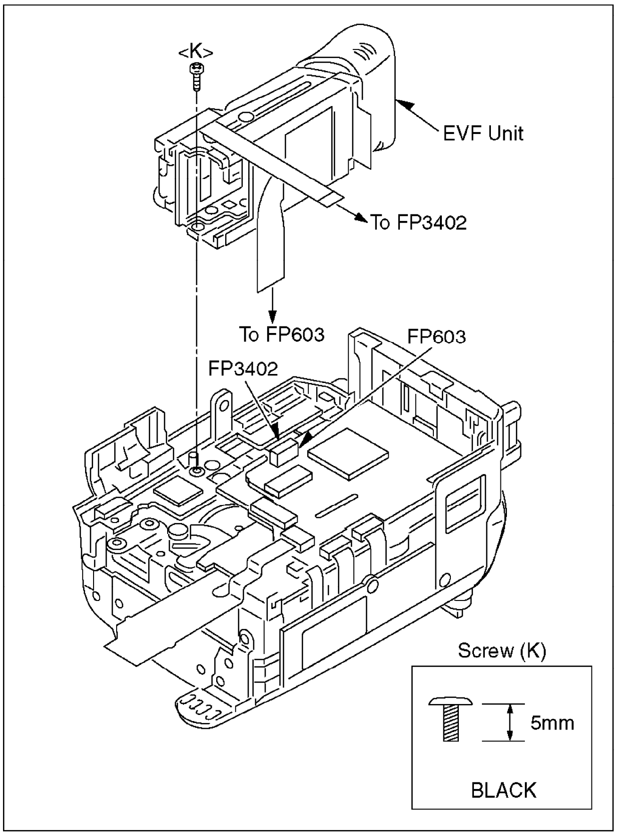

<K>
EVF Unit
To FP3402
To FP603
FP603
FP3402
Screw (K)
5mm
BLACK

Fig. D10

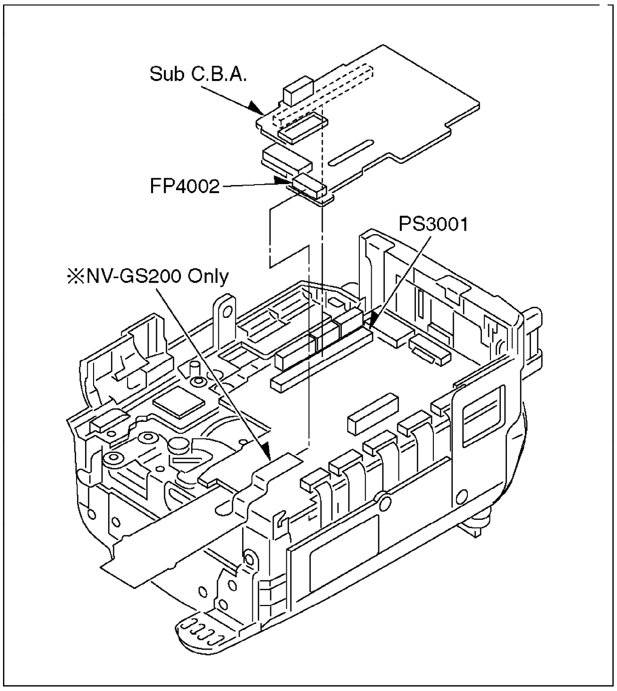

Sub C.B.A.
FP4002
PS3001
※NV-GS200 Only

Fig. D11

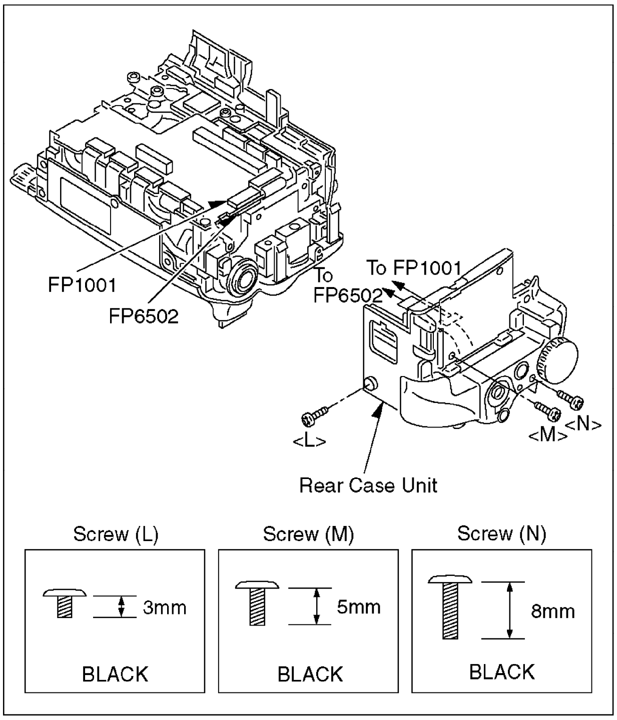

FP1001
FP6502
To FP1001
To FP6502
<L>
<M>
<N>
Rear Case Unit
Screw (L)
3mm
BLACK
Screw (M)
5mm
BLACK
Screw (N)
8mm
BLACK

Fig. D12

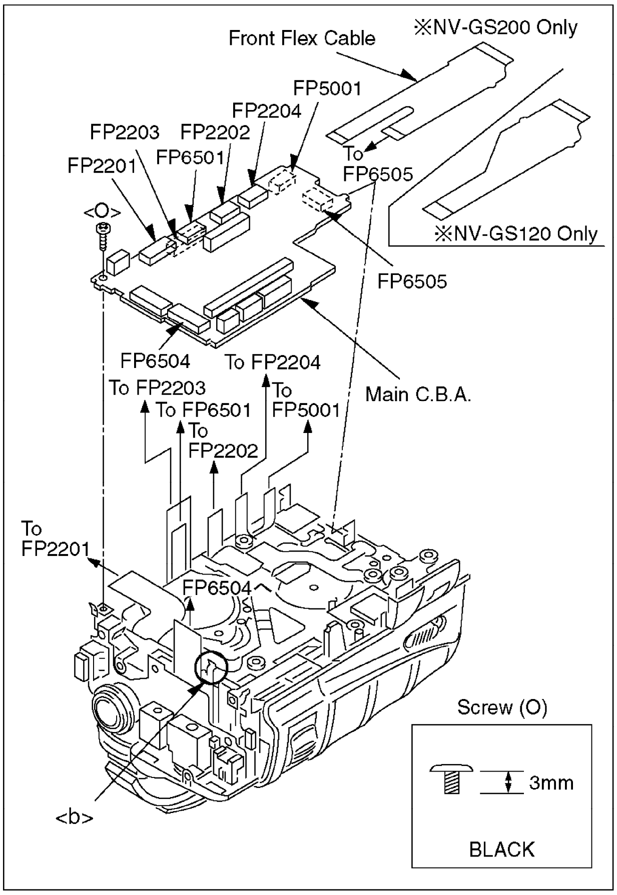

Front Flex Cable
※NV-GS200 Only
FP5001
FP2204
FP2203
FP2202
FP6501
FP2201
To FP6505
<O>
※NV-GS120 Only
FP6505
FP6504
To FP2204
To FP2203
To FP6501
To FP5001
Main C.B.A.
To FP2202
To FP2201
FP6504
<b>
Screw (O)
3mm
BLACK

Fig. D13

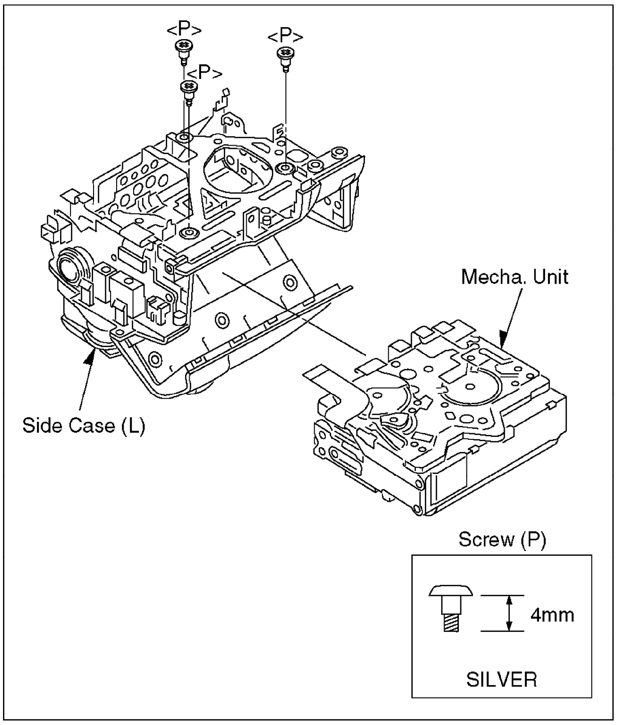

<P>
<P>
<P>
Mecha. Unit
Side Case (L)
Screw (P)
4mm
SILVER

Fig. D14

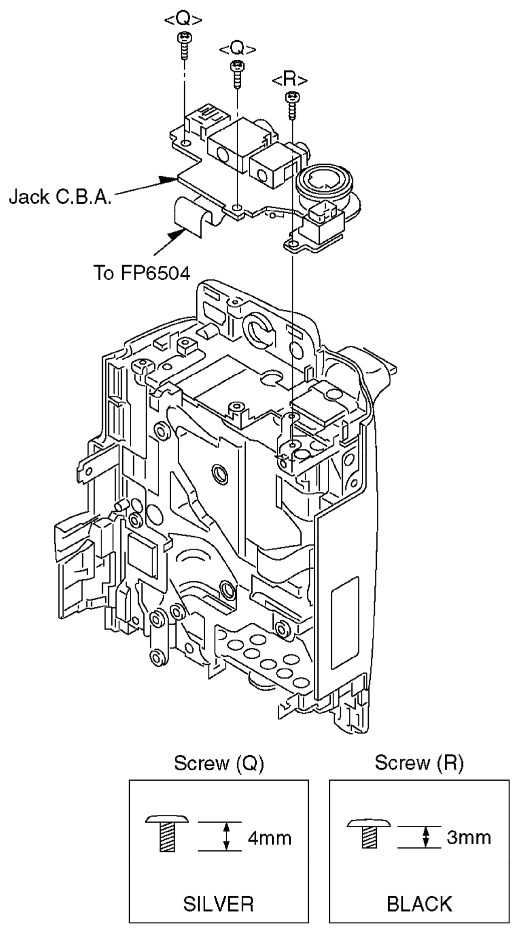
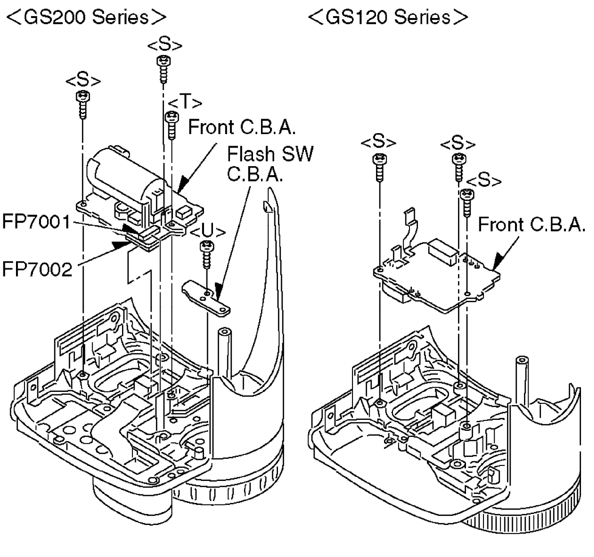
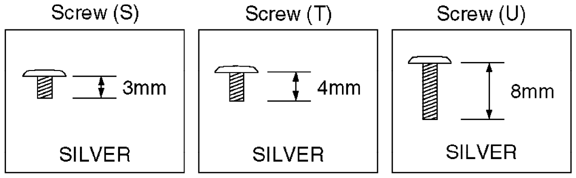

<Q>
<Q>
<R>
Jack C.B.A.
To FP6504
Screw (Q)
4mm
SILVER
Screw (R)
3mm
BLACK

Fig. D15


<GS200 Series>
<S>
<S>
<T>
Front C.B.A.
Flash SW C.B.A.
FP7001
FP7002
<U>
<GS120 Series>
<S>
<S>
<S>
Front C.B.A.


Screw (S)
3mm
SILVER
Screw (T)
4mm
SILVER
Screw (U)
8mm
SILVER

CAUTION
Be sure to discharge the capacitor on Front C.B.A. before disassembling.

CAUTION
Be careful of the high voltage circuit on Front C.B.A. when servicing.

Method:

1. Prepare the 2 Resistors (ERG2SJ221:220 ohm/2w) for discharge.
   Note:
   Above 2 Resistors may be substituted with equivalent type.
2. Make short circuit using 2 Resistors between C7004(+) and C7004(-) for 3 seconds as follows.
3. After discharging, confirm that the capacitor voltage is sufficiently lowered using a voltmeter.

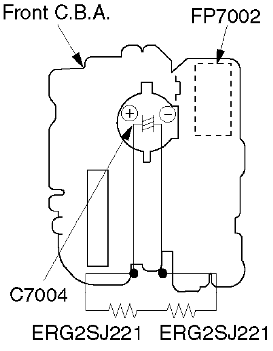

Front C.B.A.
FP7002
C7004
ERG2SJ221
ERG2SJ221

Fig. D16

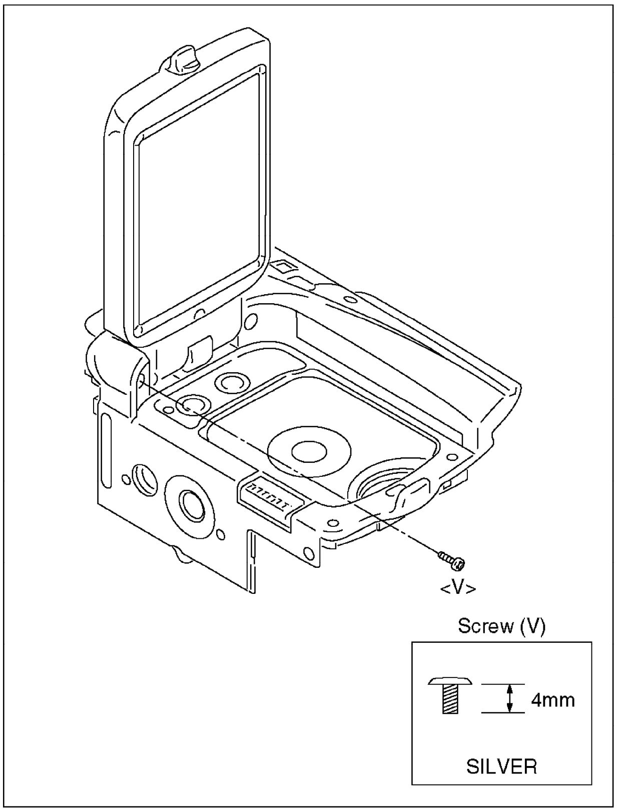

<V>
Screw (V)
4mm
SILVER

Fig. D17

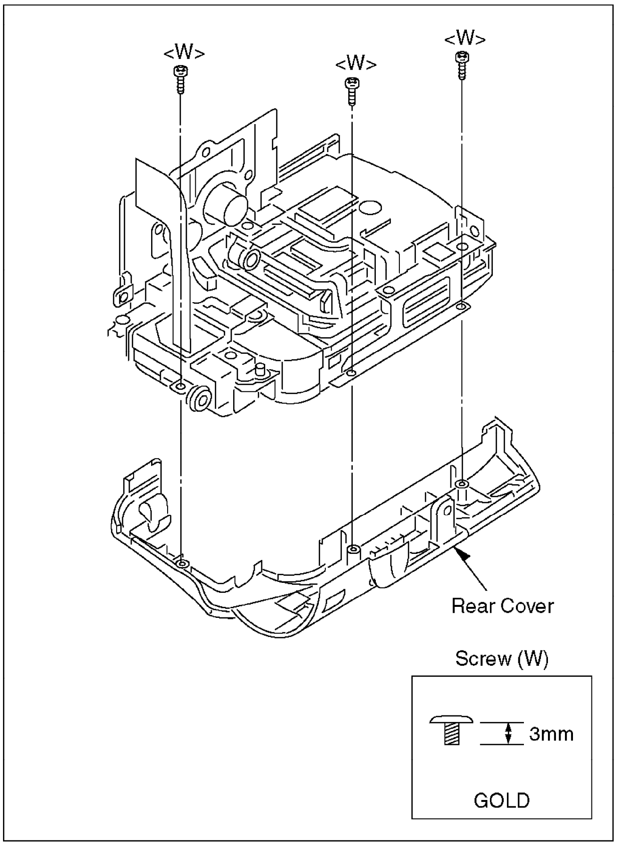

<W>
<W>
<W>
Rear Cover
Screw (W)
3mm
GOLD

Fig. D18

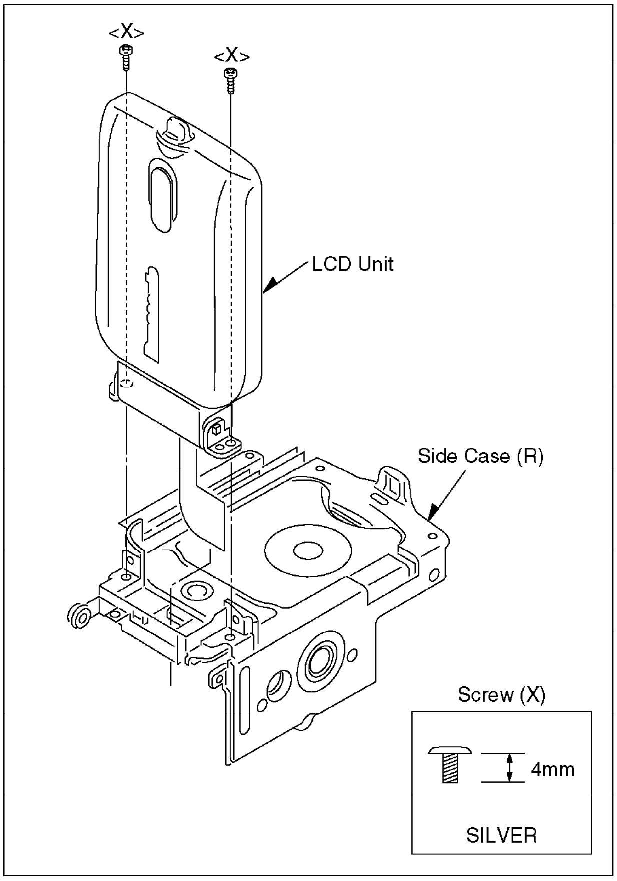

<X>
<X>
LCD Unit
Side Case (R)
Screw (X)
4mm
SILVER

Fig. D19

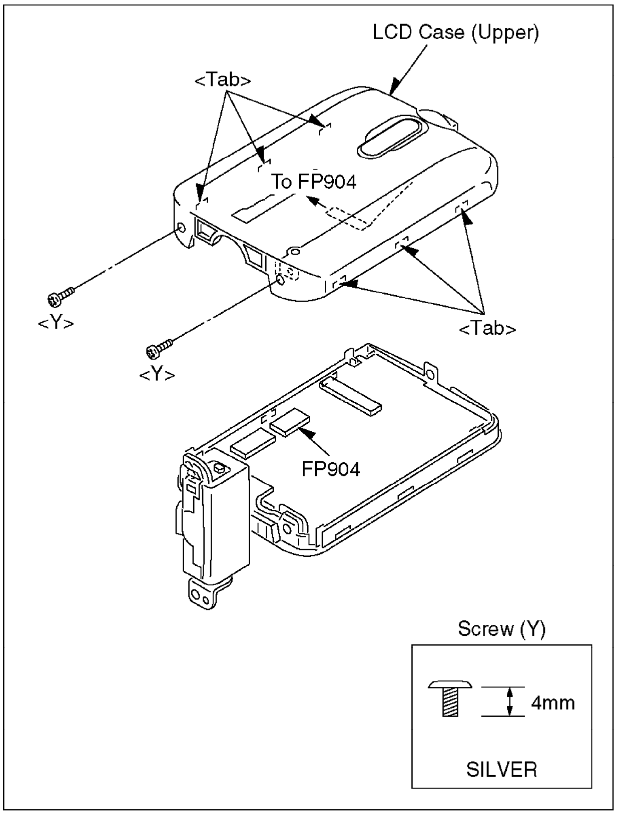

LCD Case (Upper)
<Tab>
To FP904
<Y>
<Y>
<Tab>
FP904
Screw (Y)
4mm
SILVER

Fig. D20

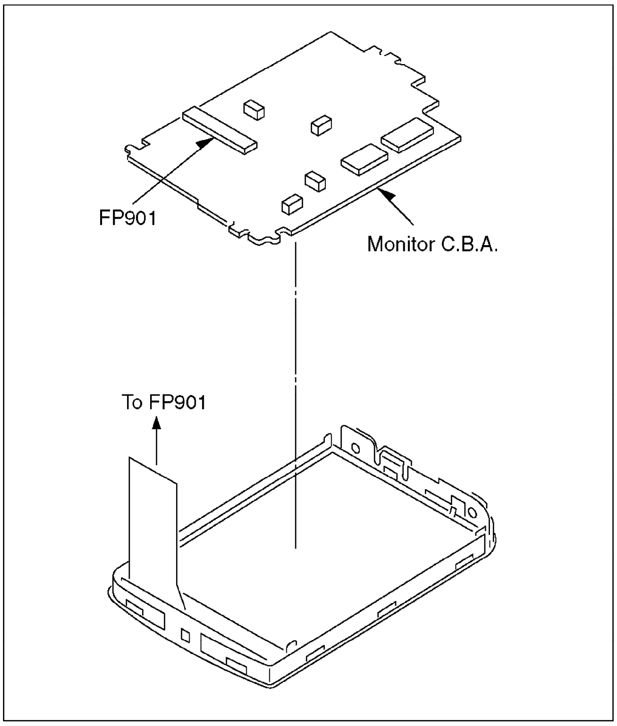
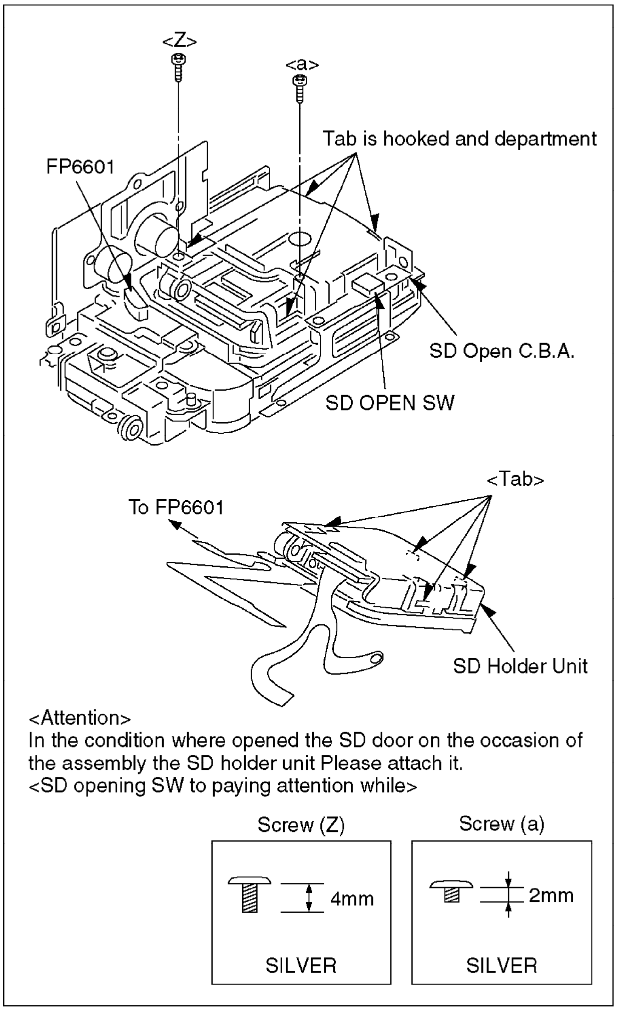

FP901
Monitor C.B.A.
To FP901

Fig. D21


<Z>
<a>
Tab is hooked and department
FP6601
SD Open C.B.A.
SD OPEN SW
<Tab>
To FP6601
SD Holder Unit
Screw (Z)
4mm
SILVER
Screw (a)
2mm
SILVER

<Attention>
In the condition where opened the SD door on the occasion of the assembly the SD holder unit Please attach it.
<SD opening SW to paying attention while>

Fig. D22

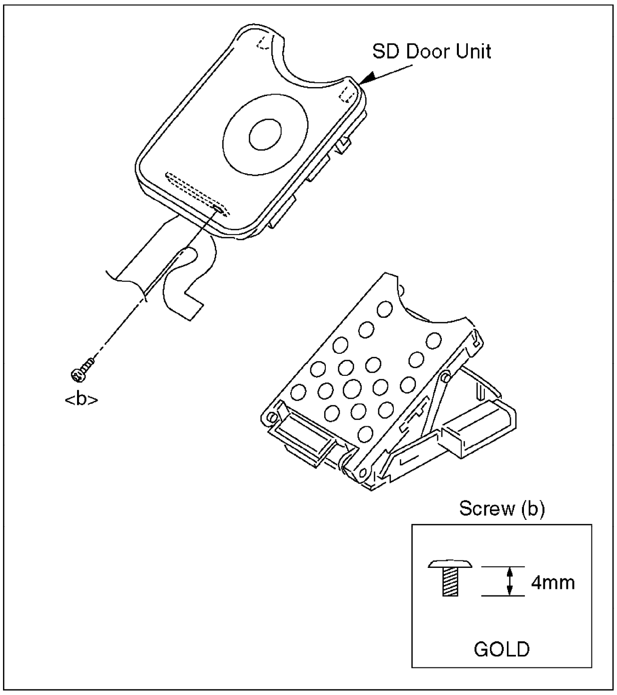

SD Door Unit
<b>
Screw (b)
4mm
GOLD

Fig. D23

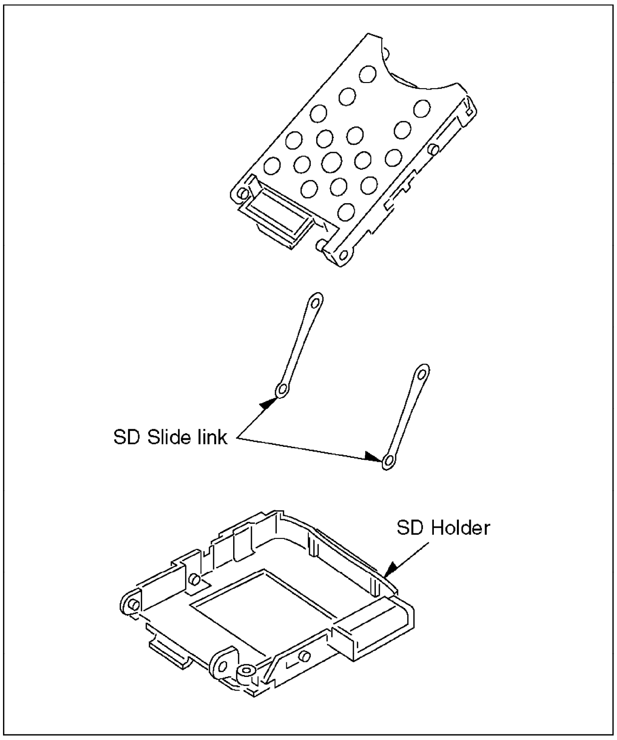

SD Slide link
SD Holder

Fig. D24

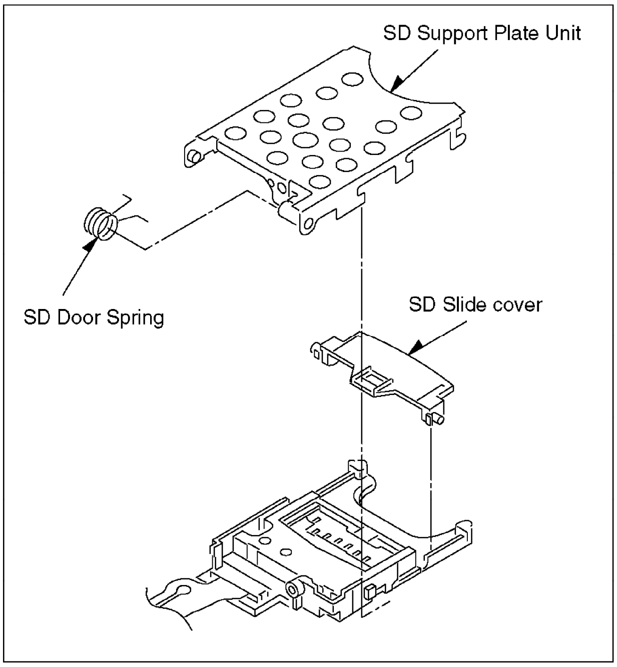

SD Support Plate Unit
SD Door Spring
SD Slide cover

Fig. D25

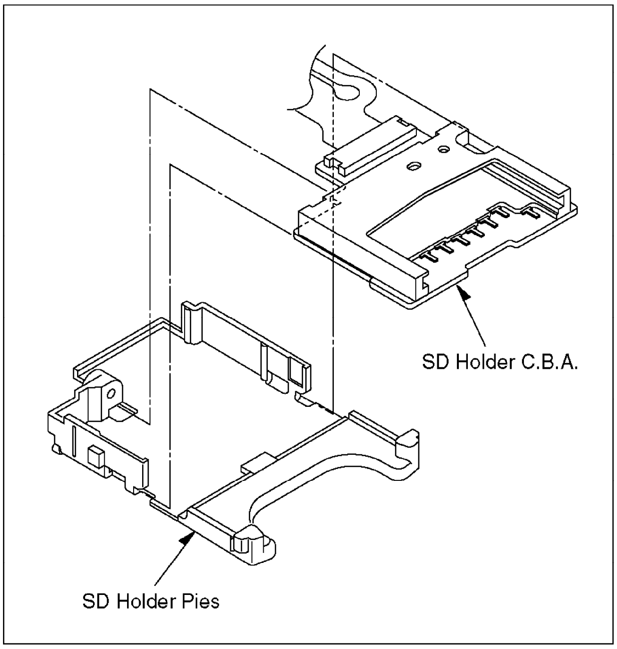

SD Holder C.B.A.
SD Holder Pies

Fig. D26

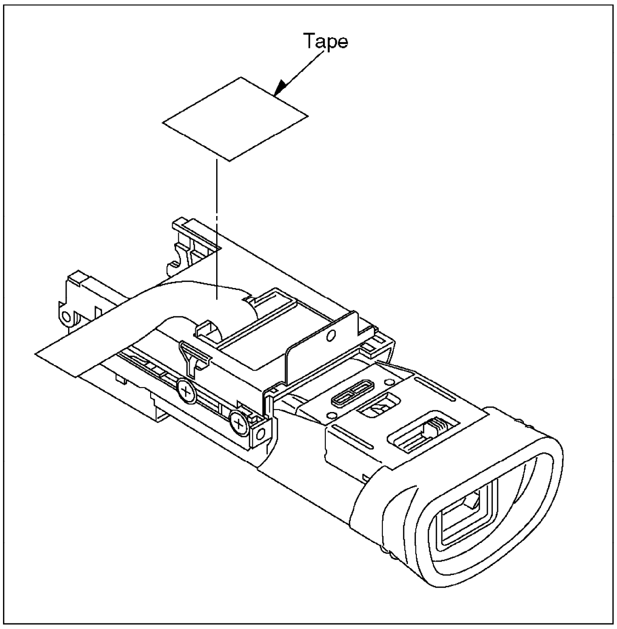


Fig. D27

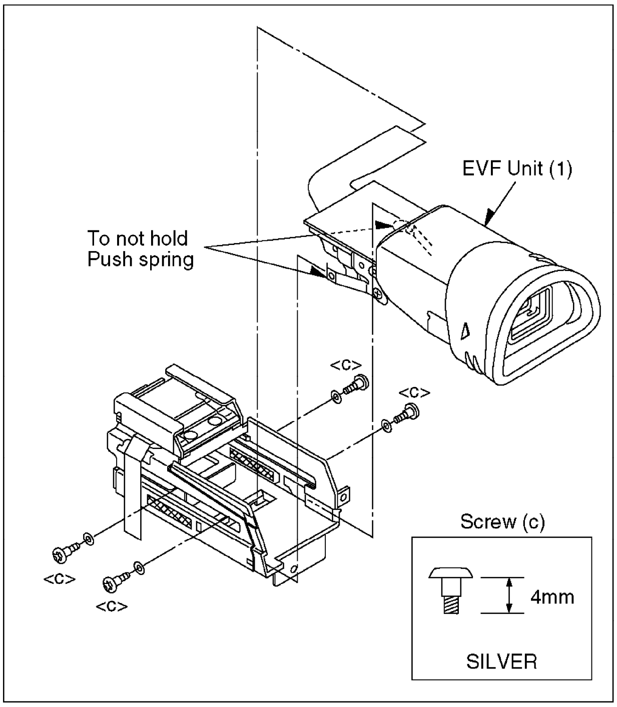

EVF Unit (1)
To not hold
Push spring
<c>
<c>
<c>
<c>
Screw (c)
4mm
SILVER

Fig. D28

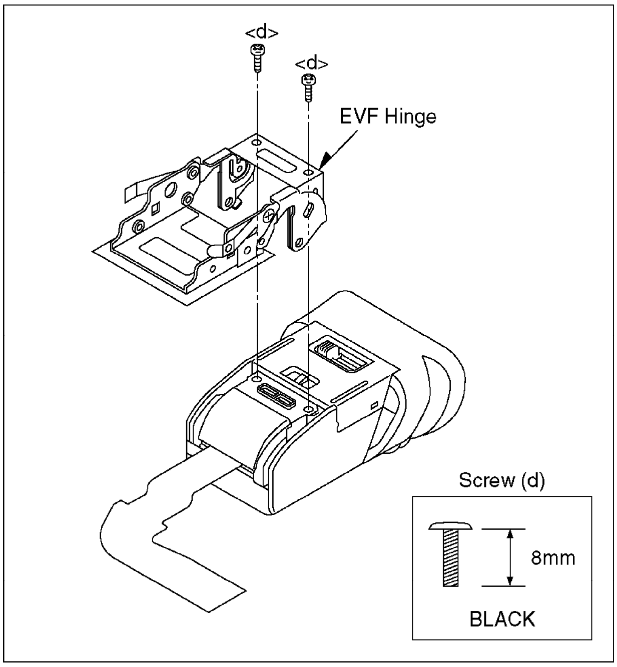

<d>
<d>
EVF Hinge
Screw (d)
8mm
BLACK

Fig. D29

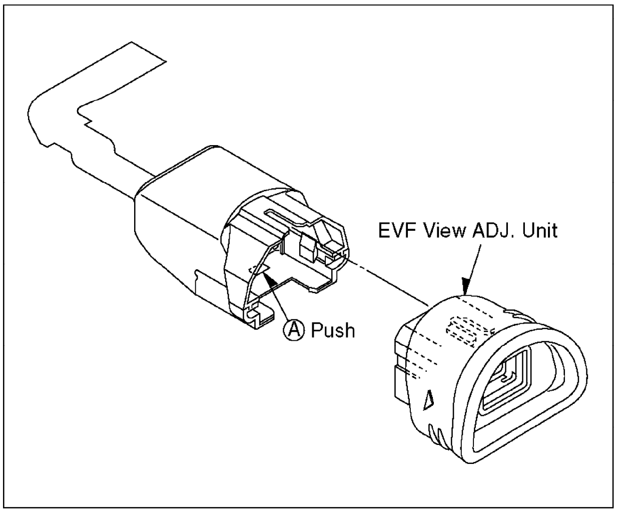

EVF View ADJ. Unit
Ⓐ Push

Fig. D30

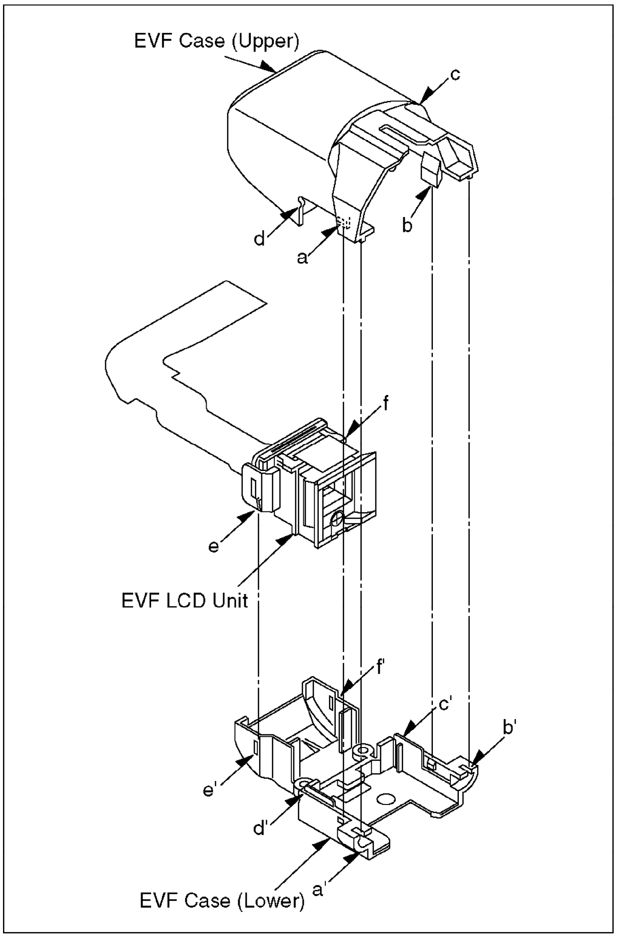
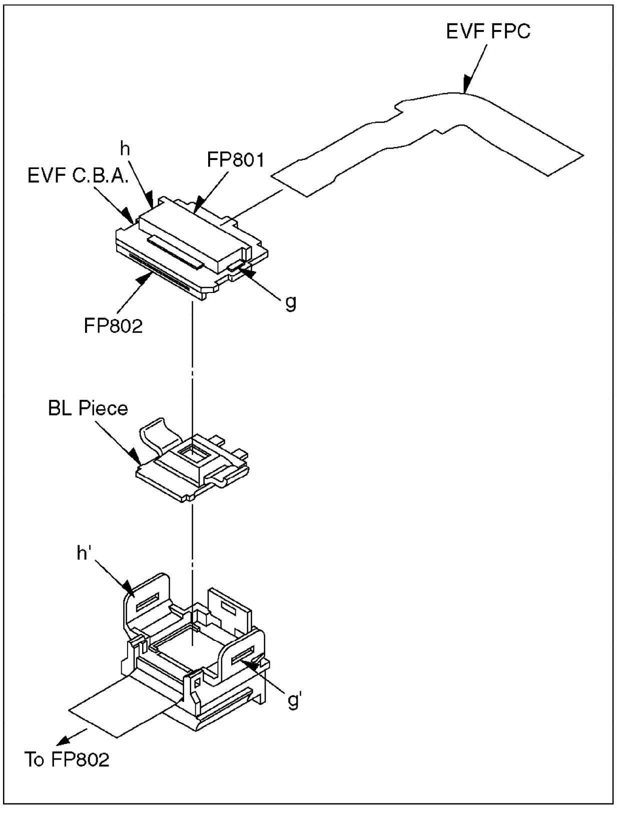

EVF Case (Upper)
c
b
d
a
f
e
EVF LCD Unit
f'
c'
b'
e'
d'
EVF Case (Lower)
a'

Fig. D31


EVF FPC
h
EVF C.B.A.
FP801
g
FP802
BL Piece
h'
g'
To FP802

5.3. DISASSEMBLY PROCEDURES MECHA. UNIT

Flow-Chart for Disassmbly Procedures

No.	Item / Part	Fig.	Removal (Screw, Connector, Flex. & Other)
1	Cassette Up Unit	Fig. M1	It makes the mechanism position in Eject condition (For Battery)
		Fig. M2	3-Screws (A)
		Fig. M3	3-Tabs
		Fig. M4	It remove the piece arrangement unit from rail department
2	Cylinder Unit	Fig. M5	1-Screw (B)
		Fig. M6	3-Screw (C) Cylinder Unit

Fig. M1

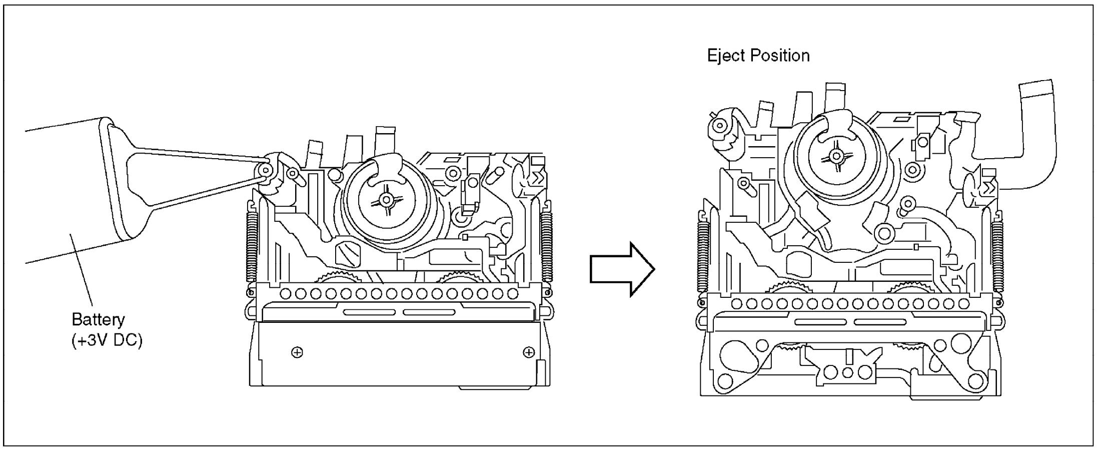

Eject Position
Battery
(+3V DC)

Fig. M2

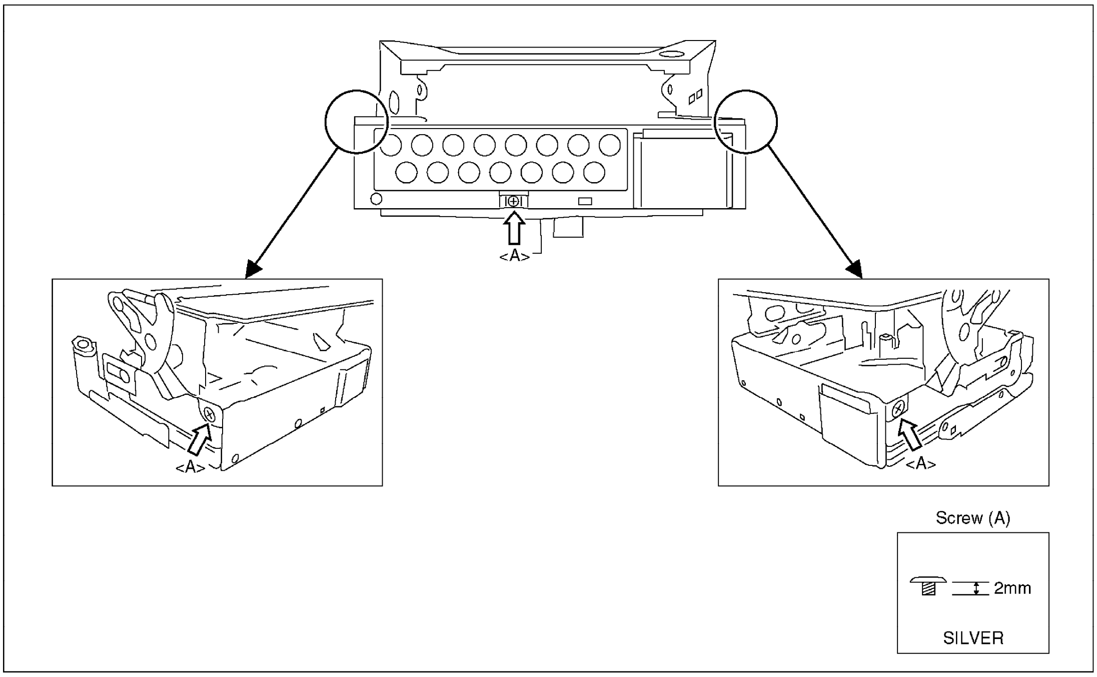

<A>
<A>
<A>
Screw (A)
2mm
SILVER

Fig. M3

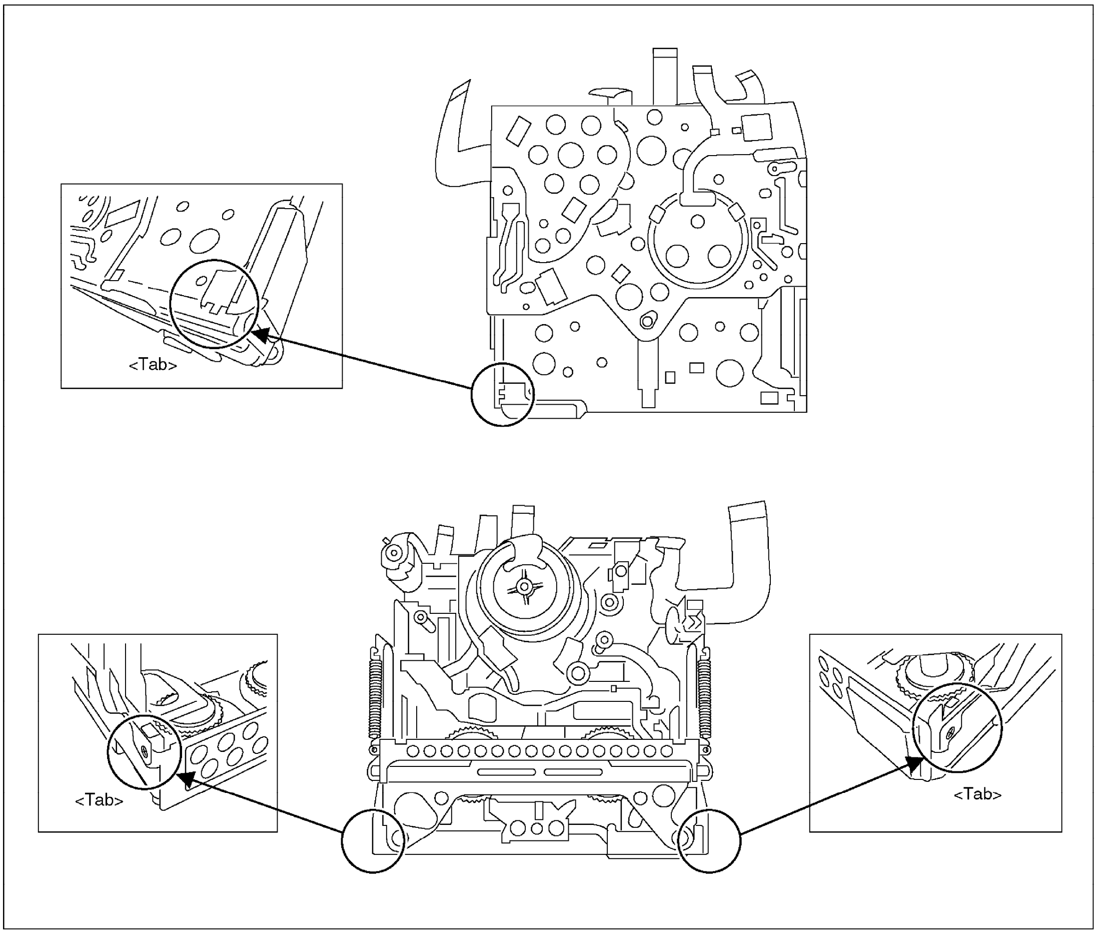


Fig. M4

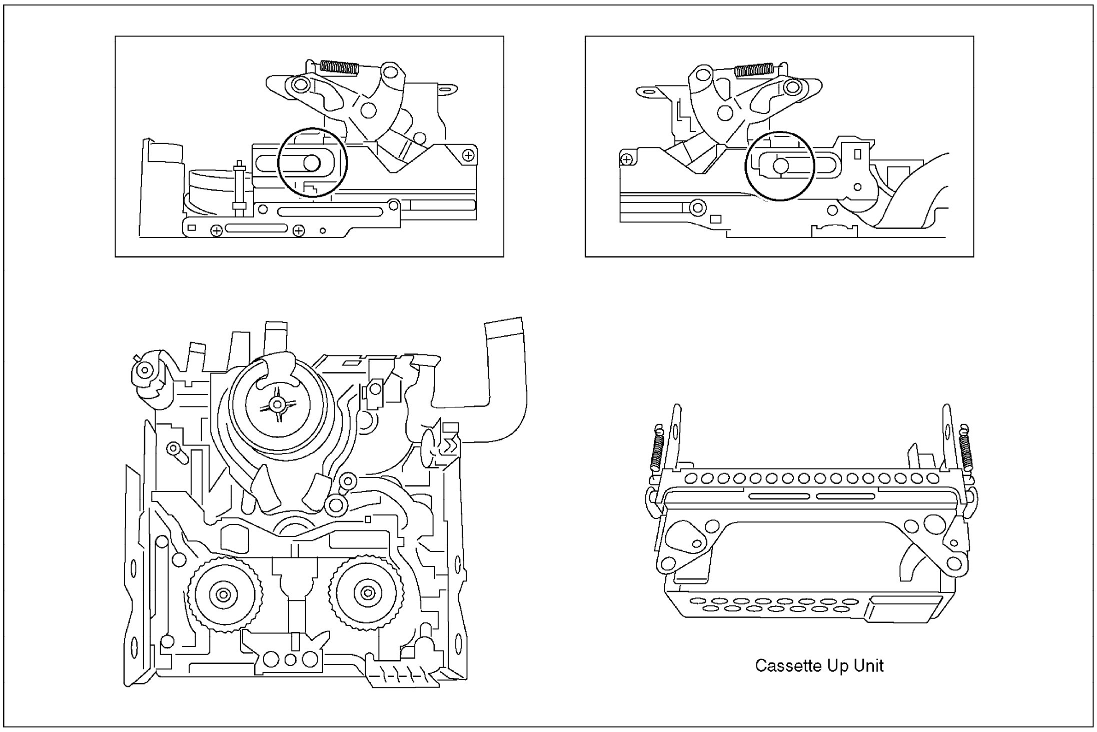

Cassette Up Unit

Fig. M5

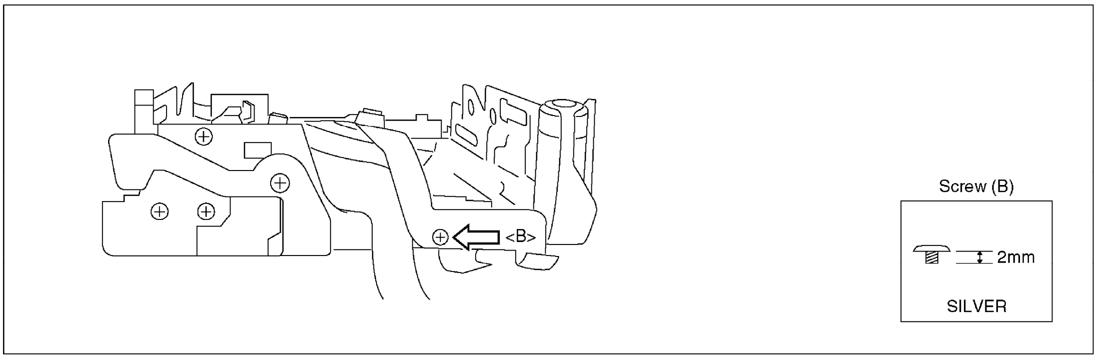
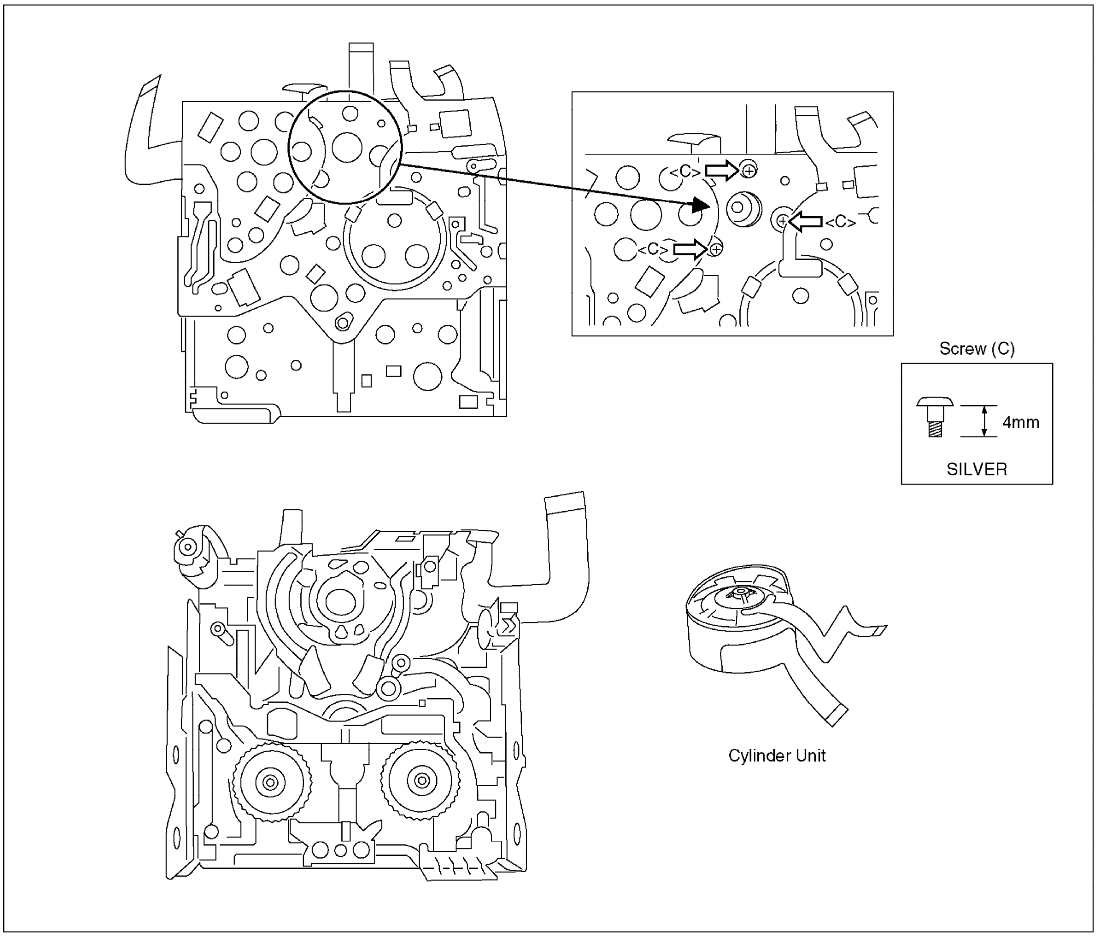

<B>
Screw (B)
2mm
SILVER

Fig. M6


<C>
<C>
<C>
Screw (C)
4mm
SILVER
Cylinder Unit

5.4. DISASSEMBLY PROCEDURES OF CAMERA LENS UNIT

The following flowchart describes order or steps for removing the Camera lens unit and certain printed circuit boards in order to make access to the item needing service.

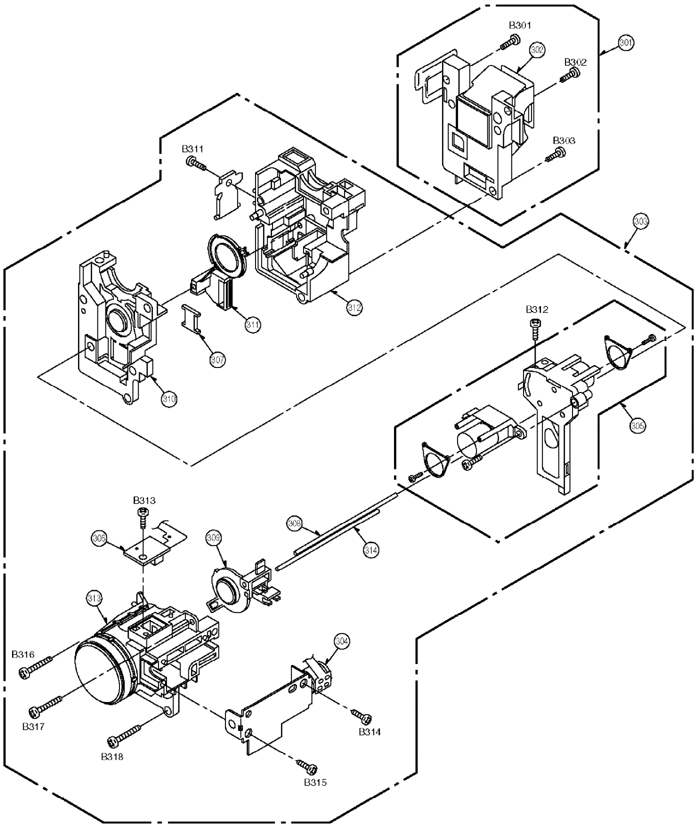
To reassemble the unit follow the steps in reverse order.

Fig. L1

1. Prism Unit	Ref.-No.301
2. Master Flange Unit	Ref.-No.312
3. 4th Moving Frame Unit & Side Yoke	Ref.-No.311/307
4. 3rd Moving Frame Unit	Ref.-No.310
5. IRIS Unit	Ref.-No.305
6. Guide Pole & 2nd Moving Frame Unit	Ref.-No.308/309/314
7. Zoom Motor Unit	Ref.-No.304
8. Lens Flex. C.B.A. & Lens Main Frame Unit	Ref.-No.306/313

Note 1:
Each Ref.numbers are equivalent to number of Fig.L2 and Parts List.

Fig. L2


B301
301
302
B302
B303
B311
303
312
311
307
310
B312
305
B313
306
309
308
314
313
304
B316
B317
B318
B314
B315

6. SERVICE CAUTION

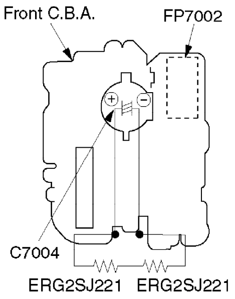
6.1. HOW TO DISCHARGE THE CAPACITOR ON FRONT C.B.A.

CAUTION
Be sure to discharge the capacitor on Front C.B.A. before disassembling.
CAUTION
Be careful of the high voltage circuit on Front C.B.A. when servicing.

Method:
1. Prepare the 2 Resistors (ERG2SJ221:220 ohm/2w) for discharge.

Note:
Above 2 Resistors may be substituted with equivalent type.

2. Make short circuit using 2 Resistors between C7004(+) and C7004(-) for 3 seconds as follows.
3. After discharging, confirm that the capacitor voltage is sufficiently lowered using a voltmeter



6.2. EEPROM DATA FOR SPARE PARTS OF THE MAIN C.B.A.

When the Main C.B.A. is replaced, the fixed and average data must be changed by Tatsujin kit according to the Movie Camera's suffix.
Then, confirm and/or adjust the VTR and Camera section one by one.

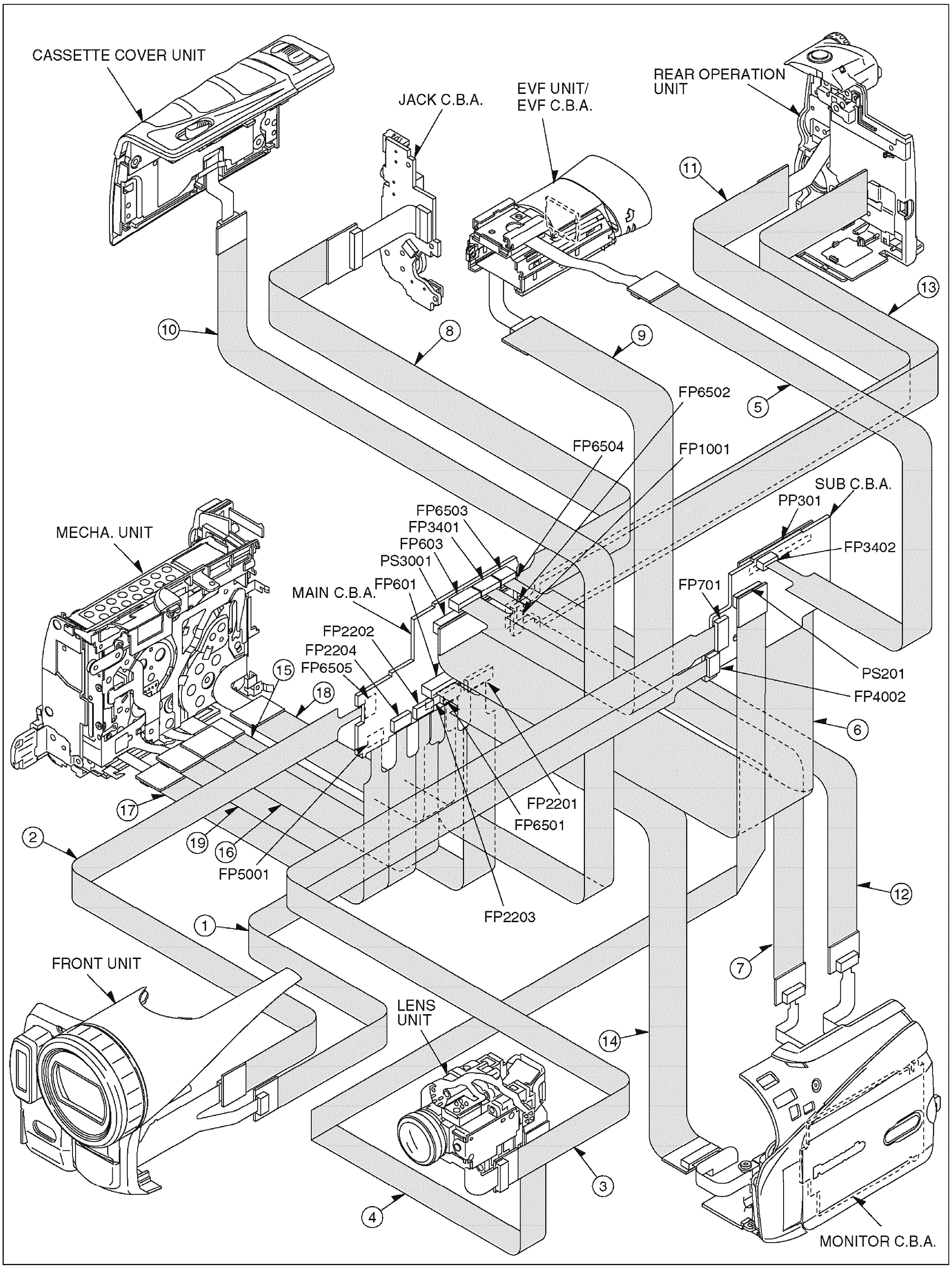
6.3. SERVICE EXTENSION CABLE FOR ALL C.B.A. INCLUDED IN MODULE UNIT

This models is required the following extension cables for all connections.
Use the following extension cables when checking or adjusting individual circuit boards.

Ref.	Part No.	Pin	Part Name	Connection	Q'ty	Remarks
(1)	VFK1440	10	Flat Cable	FP4002 (SUB) - FP4801(FRONT)	1	GS200 Only
(2)	VFK1442	21	Flat Cable	FP6505 (MAIN) - FP4801(FRONT)	1	
(3)	VFK1575C3320	33	Flat Cable	FP701 (SUB) - LENS	1	
(4)	VFK1453	40	Flat Cable	PS201 (SUB) - PP201(PRISM U)	1	
(5)	VFK1440	10	Flat Cable	FP3402 (SUB) - HOT SHOE	1	
(6)	VFK1582BF010	150	Flat Cable	PS3001 (MAIN) - PP301(SUB)	1	GS200
(6)	VFK1833	100	Flat Cable	PS3001 (MAIN) - PP301(SUB)	1	GS120
(7)	VFK1440	10	Flat Cable	FP3401 (MAIN) - SD HOLDER	1	
(8)	VFK1575C3320	33	Flat Cable	FP6504 (MAIN) - FP6201(JACK)	1	
(9)	VFK1443	18	Flat Cable	FP603 (MAIN) - FP801(EVF)	1	
(10)	VFK1442	21	Flat Cable	FP6501 (MAIN) - FP6301(SIDE L)	1	
(11)	VFK1173	14	Flat Cable	FP6502 (MAIN) - REAR OP.	1	
(12)	VFK1440	10	Flat Cable	FP6503 (MAIN) - VTR OP.	1	
(13)	VFK1173	14	Flat Cable	FP1001 (MAIN) - BATTRY CATCHER	1	
(14)	VFK1492	26	Flat Cable	FP601 (MAIN) - FP902(MONITOR)	1	
(15)	VFK1443	18	Flat Cable	FP2203 (MAIN) - MECHA SUB	1	
(16)	VFK1440	10	Flat Cable	FP2002 (MAIN) - CYL DRIVE	1	
(17)	VFK1441	8	Flat Cable	FP5001 (MAIN) - RT (HERD AMP) MECHA	1	
(18)	VFK1443	18	Flat Cable	FP2201 (MAIN) - CAP DRIVE	1	
(19)	VFK1441	8	Flat Cable	FP2204 (MAIN) - LOADING MOTOR	1	

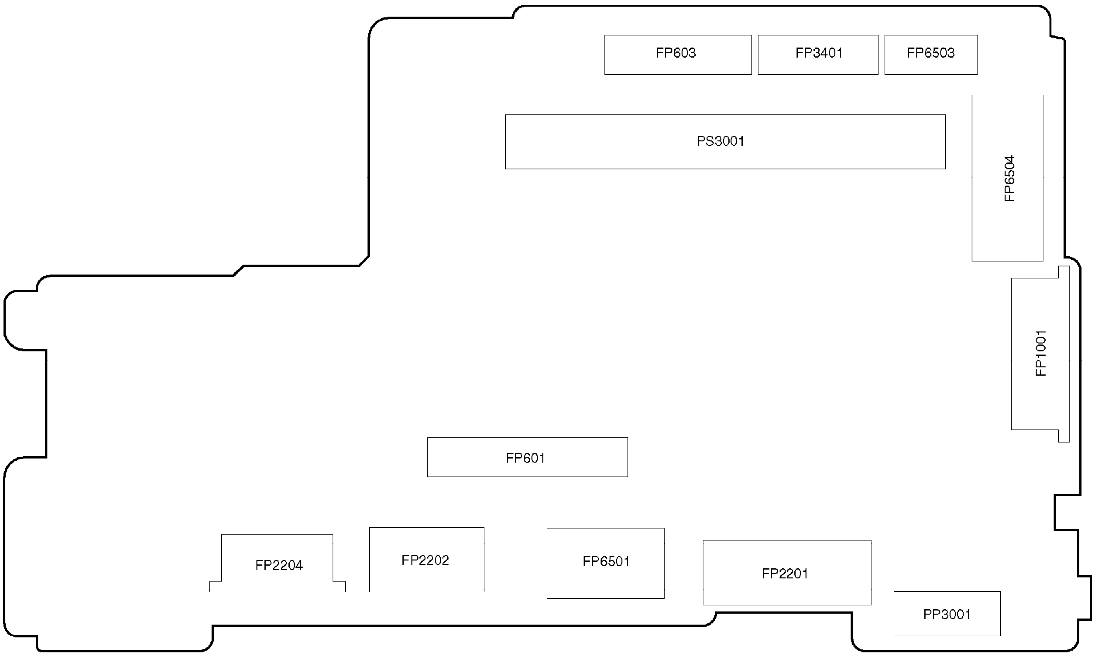
How to use extension cables.

Fig. T1

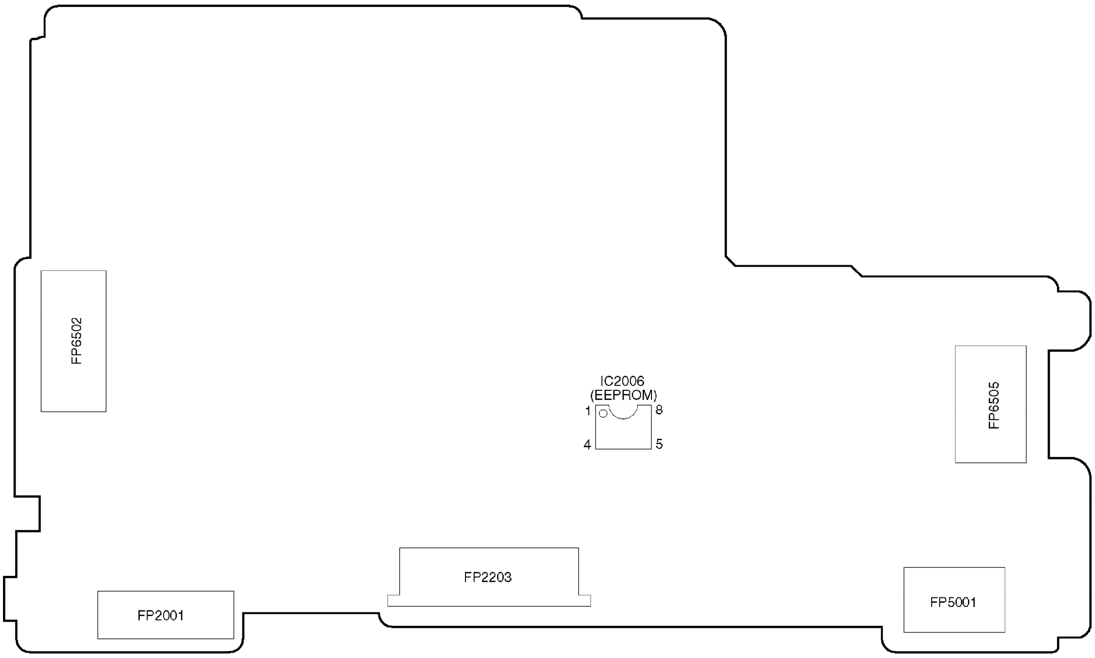

CASSETTE COVER UNIT
JACK C.B.A.
EVF UNIT/
EVF C.B.A.
REAR OPERATION
UNIT
⑪
⑬
⑩
⑧
⑨
FP6502
⑤
FP6504
FP1001
SUB C.B.A.
PP301
FP3402
FP6503
FP3401
FP603
PS3001
MECHA. UNIT
MAIN C.B.A.
FP601
FP701
FP2202
FP2204
FP6505
⑮
⑱
PS201
FP4002
⑥
FP2201
FP6501
⑰
②
⑲
⑯
FP5001
FP2203
⑫
①
⑦
FRONT UNIT
LENS
UNIT
⑭
③
④
MONITOR C.B.A.

6.4. LOCATION FOR SPARE CONNECTORS OF THE MAIN C.B.A. & SUB C.B.A.

6.4.1. MAIN C.B.A.

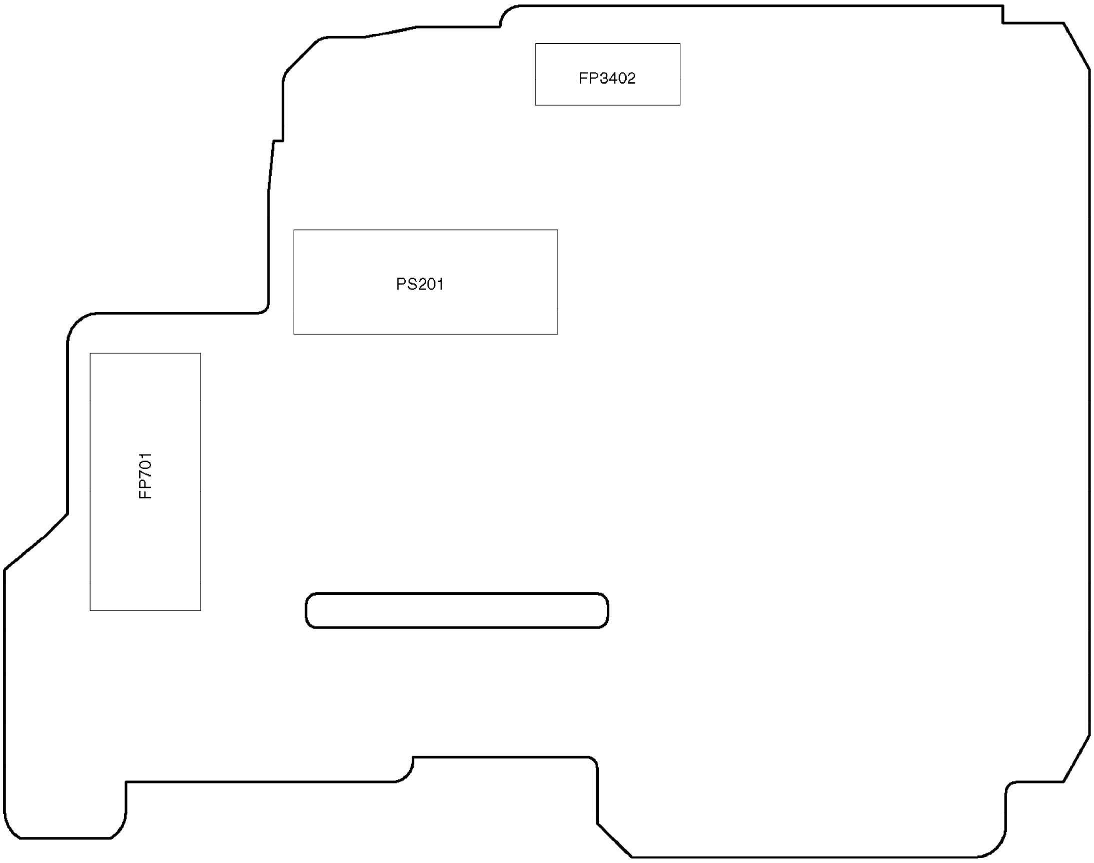

FP603
FP3401
FP6503
PS3001
FP6504
FP1001
FP601
FP2204
FP2202
FP6501
FP2201
PP3001

(COMPONENT SIDE)

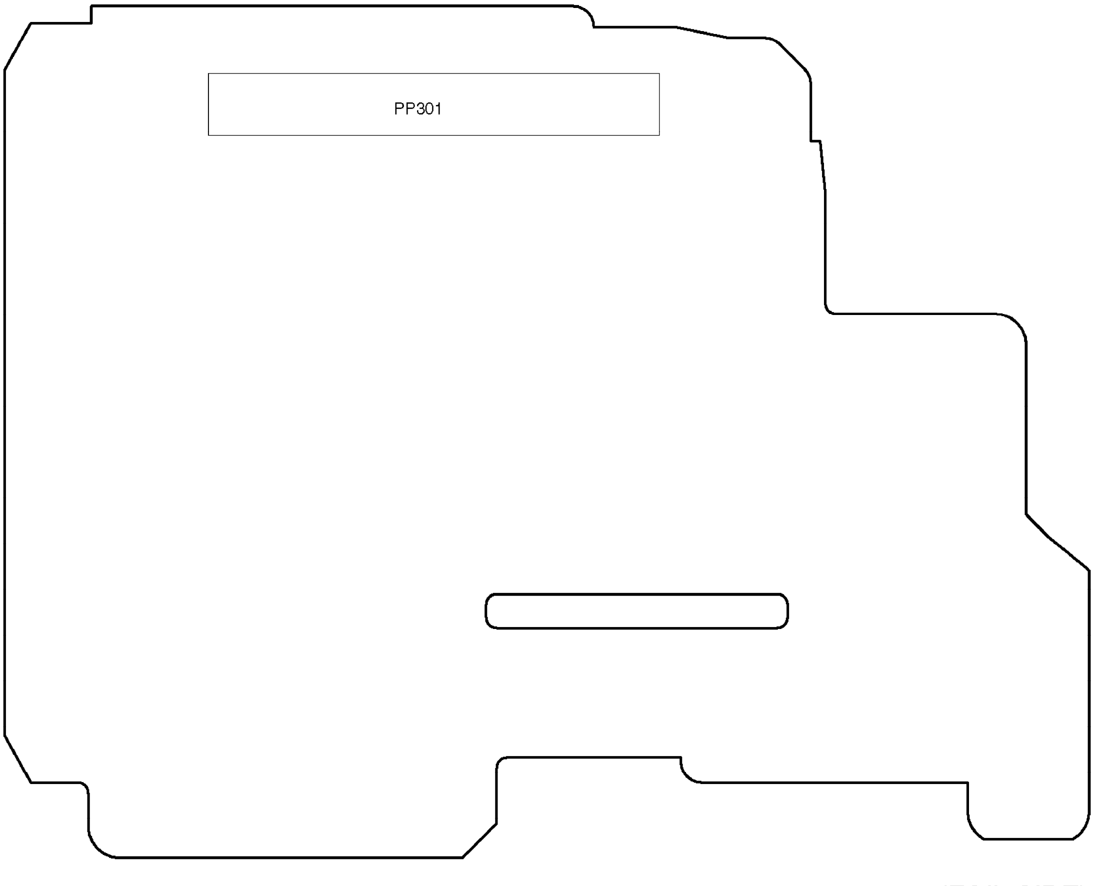

FP6502
IC2006
(EEPROM)
1
8
4
5
FP6505
FP2203
FP2001
FP5001

(FOIL SIDE)

6.4.2. SUB C.B.A. (NV-GS120GD ONLY)


FP3402
PS201
FP701

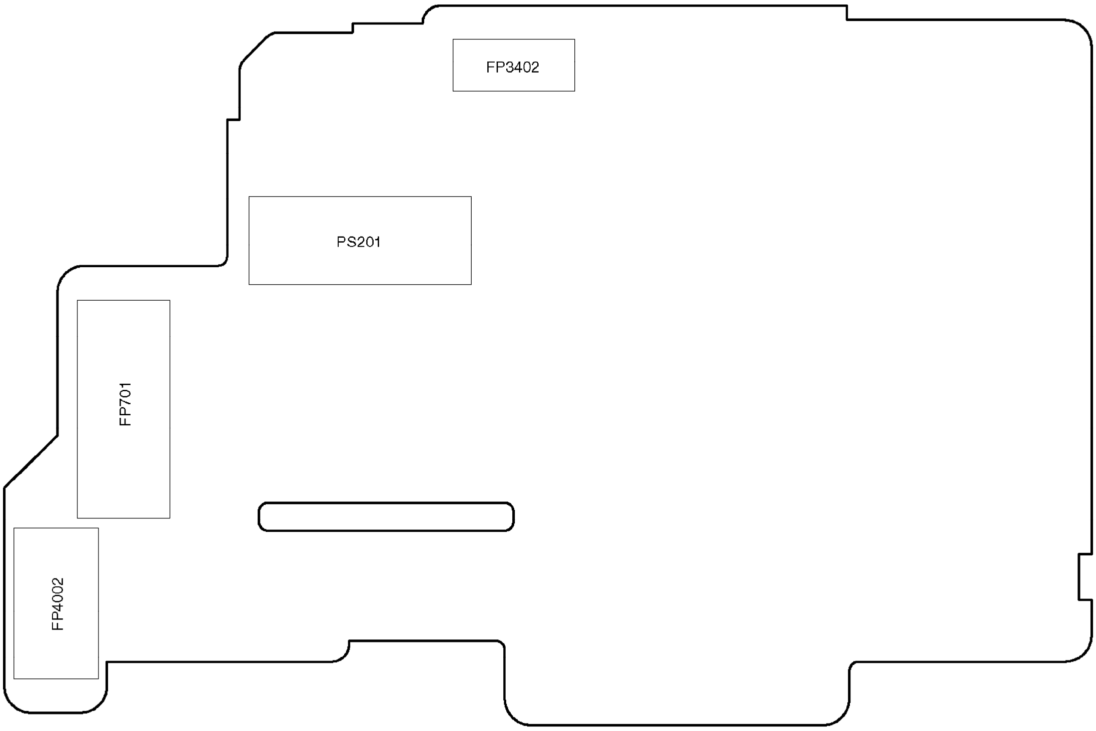
(COMPONENT SIDE)



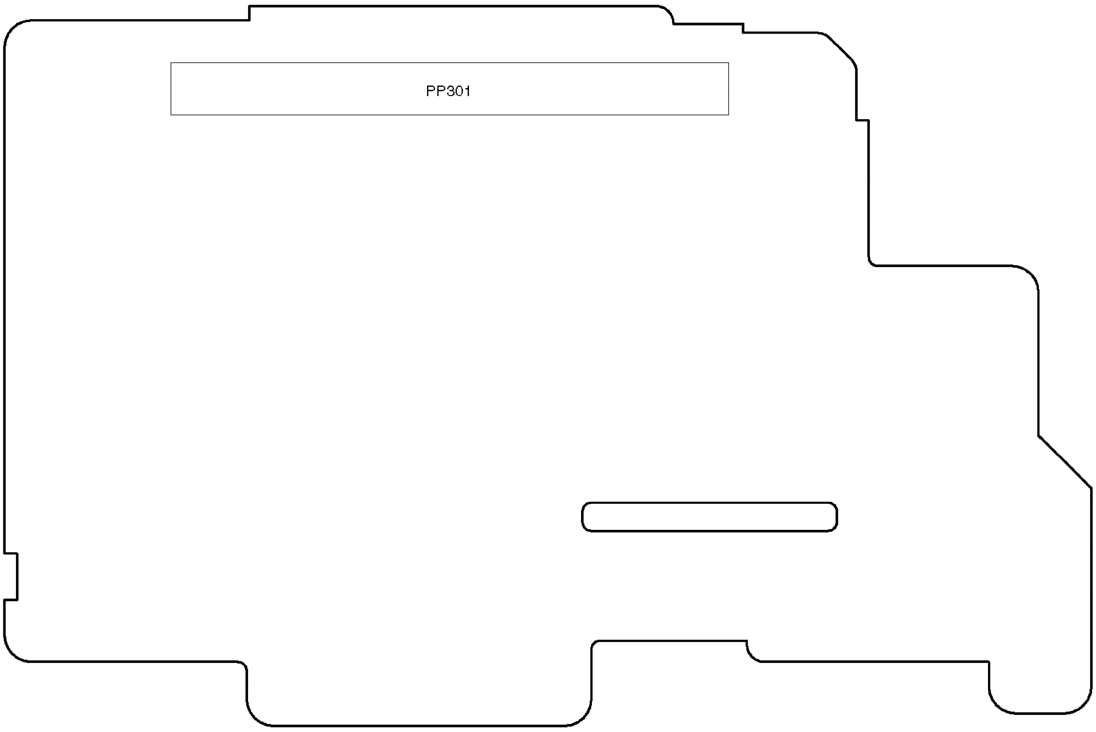
(FOIL SIDE)

(FOIL SIDE)

6.4.3. SUB C.B.A. (NV-GS200GD ONLY)


FP3402
PS201
FP701
FP4002

(COMPONENT SIDE)

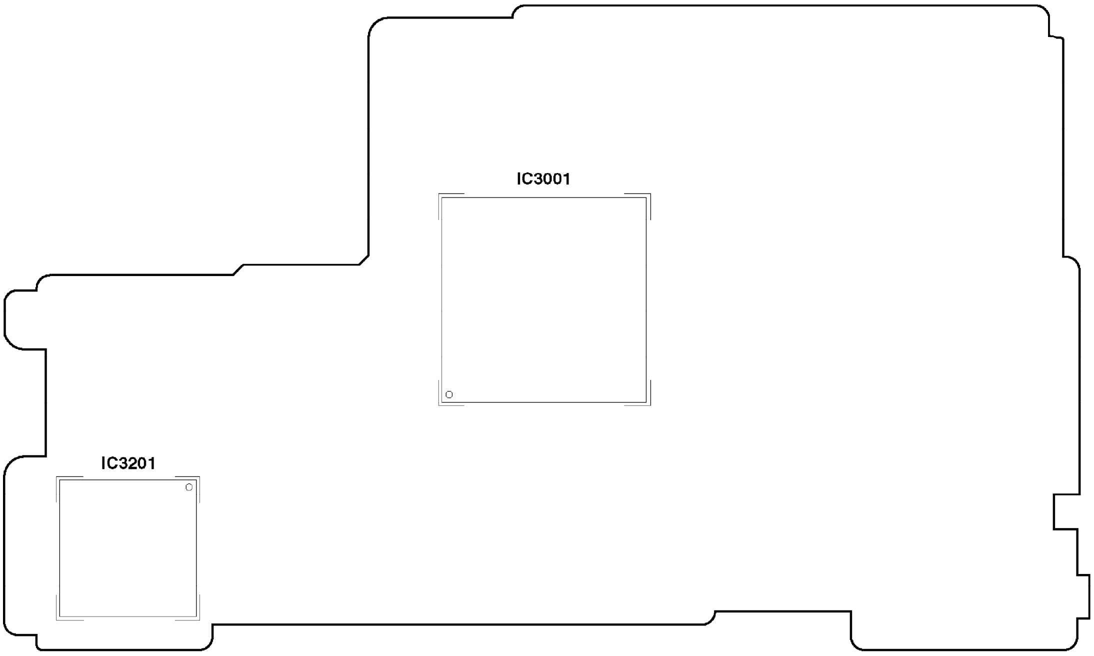


(FOIL SIDE)

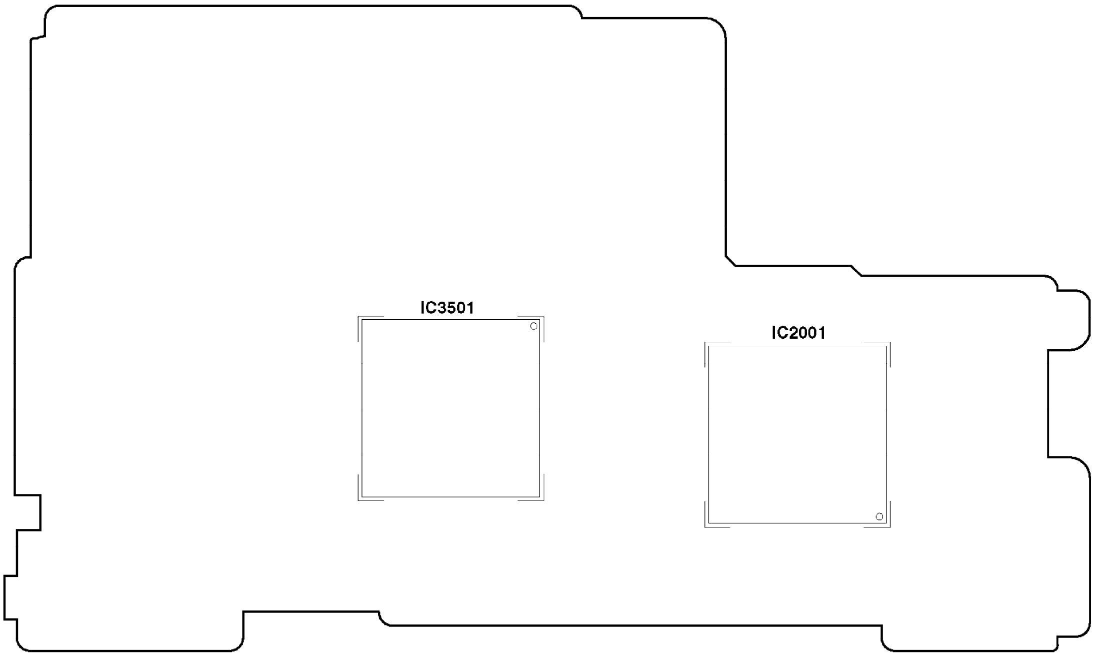
6.5. CSP IC LOCATION OF THE MAIN C.B.A. & SUB C.B.A.

Make sure to install CSP IC in the correct position of the Main C.B.A. & Sub C.B.A. as shown.

6.5.1. MAIN C.B.A.

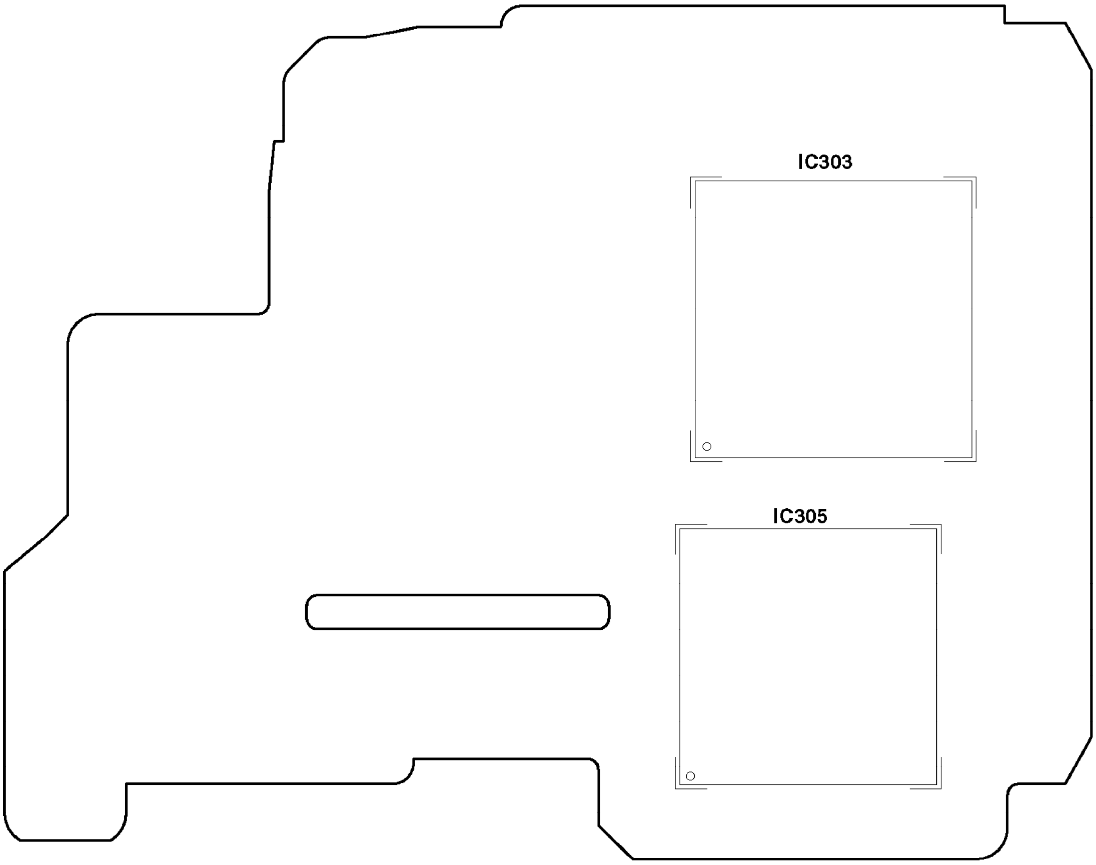

IC3001
IC3201

(COMPONENT SIDE)

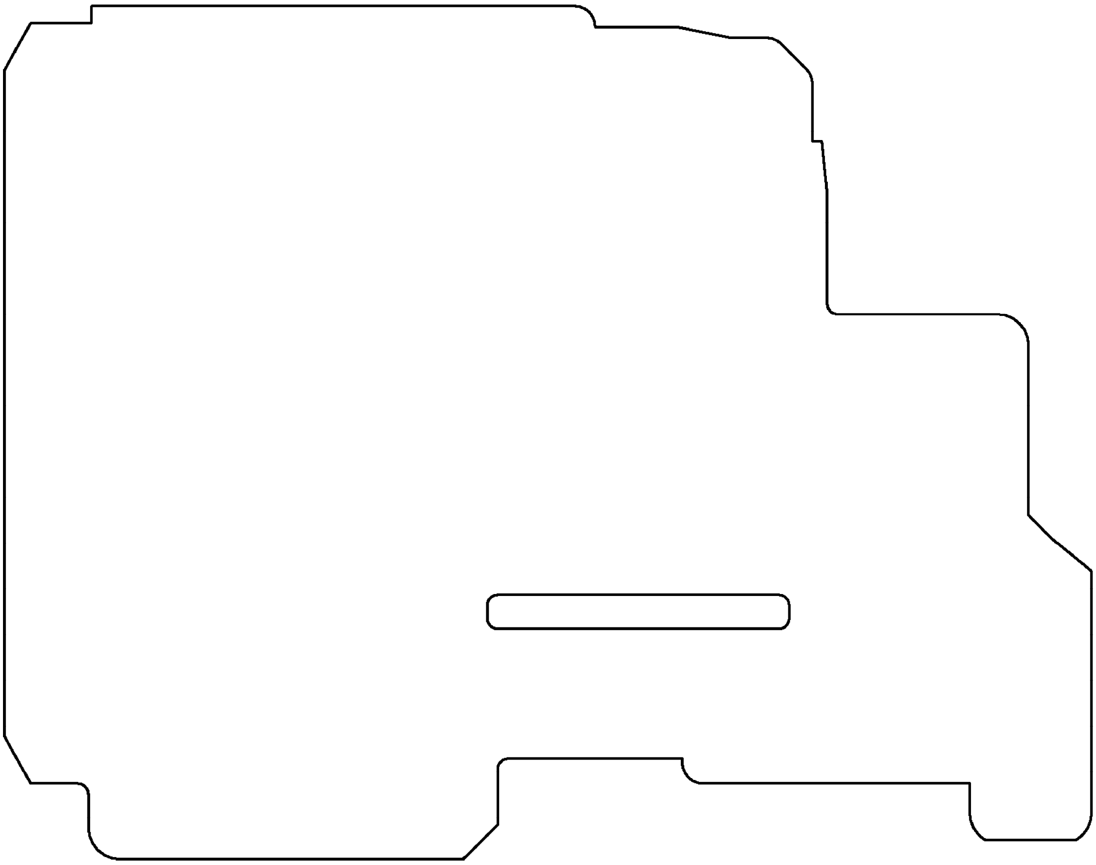

IC3501
IC2001

(FOIL SIDE)

6.5.2. SUB C.B.A. (NV-GS120GD ONLY)


IC303
IC305

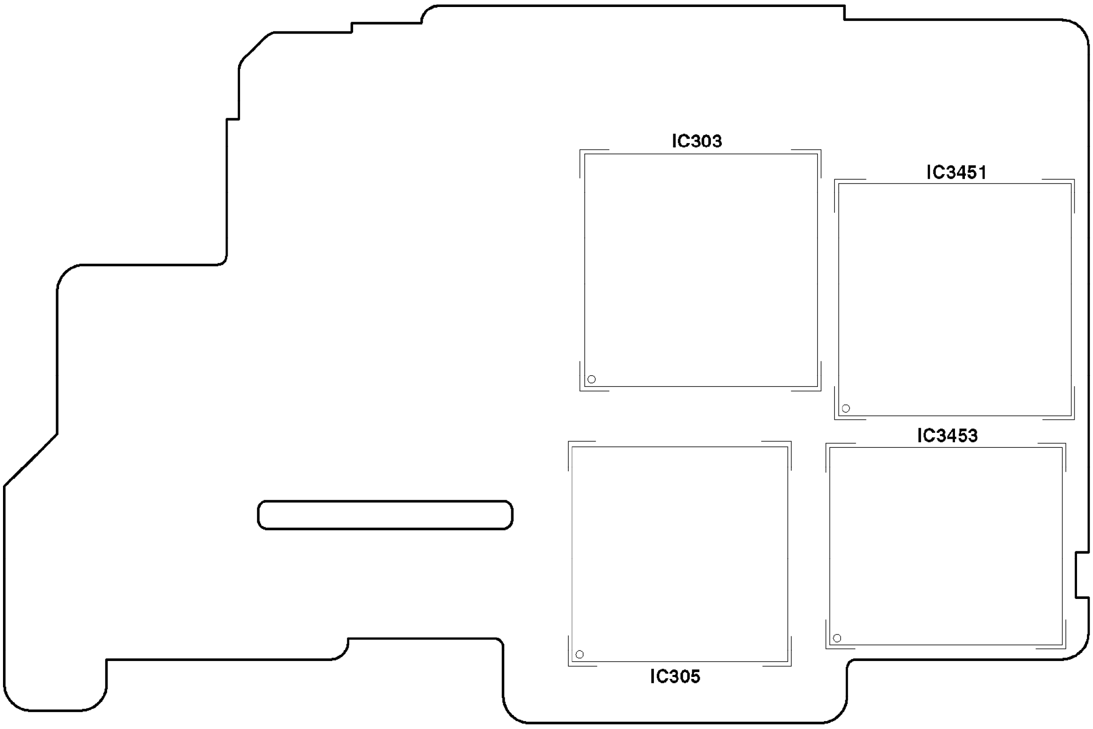
(COMPONENT SIDE)



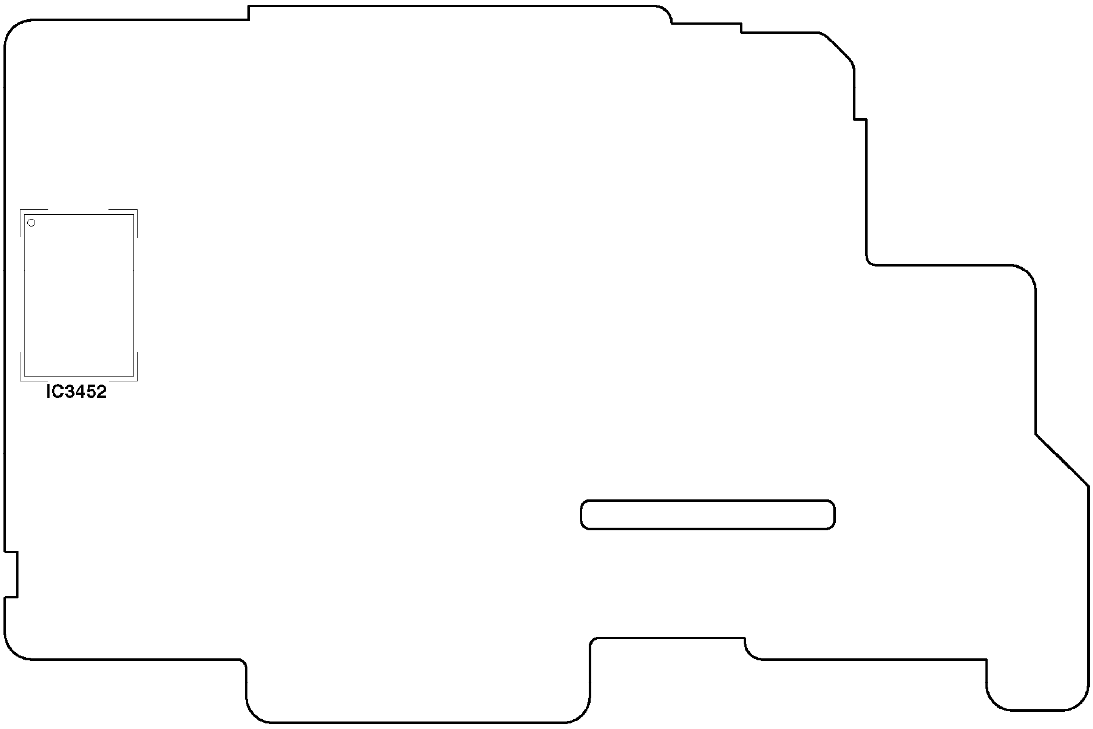
(FOIL SIDE)

(FOIL SIDE)

6.5.3. SUB C.B.A. (NV-GS200GD ONLY)


IC303
IC3451
IC3453
IC305

(COMPONENT SIDE)



(FOIL SIDE)

7. ELECTRICAL ADJUSTMENT PROCEDURES

7.1. COMPUTER ASSISTED ADJUSTMENT SYSTEM < TATSUJIN > ADJUSTMENT.

This unit employs the computer assisted system named; “TATSUJIN PC-Adjustment” for Electrical adjustment.

7.2. SET-UP MANUAL FOR DV-Camcorder.

1. SAVE THE SOFTWARE

Install the effective model’s TATSUJIN Software to PC: Personal Computer.

2. SET-UP (CONNECTION)

A. Remove the EVR cover of the DV Camcorder.

Unlock the locking tab and remove the EVR cover as shown in Fig. E1.

B. Make a connection.

Connect the PC, the PC/IF Unit and the DV Camcorder as shown in Fig.E2 and E3.

C. Check the SW position on Measuning Board.

The position of SW on Measuning Board checks as shown in Fig. E4.

Fig. E1

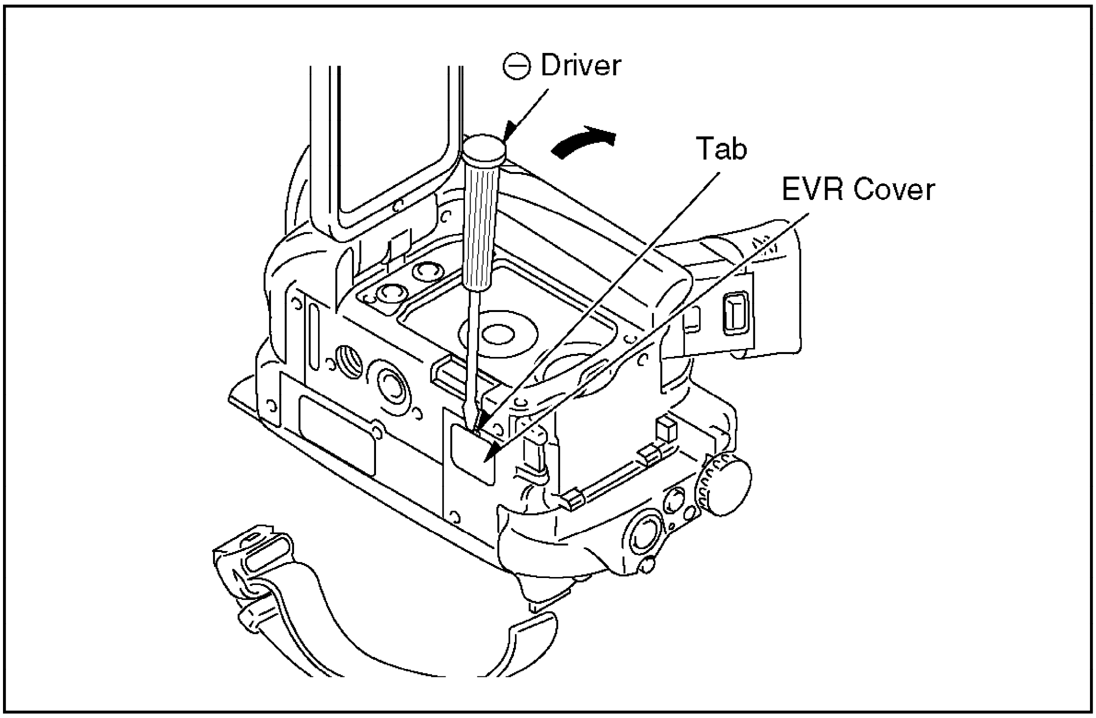


Fig. E2 Necessary Equipment & Tools for Connection.

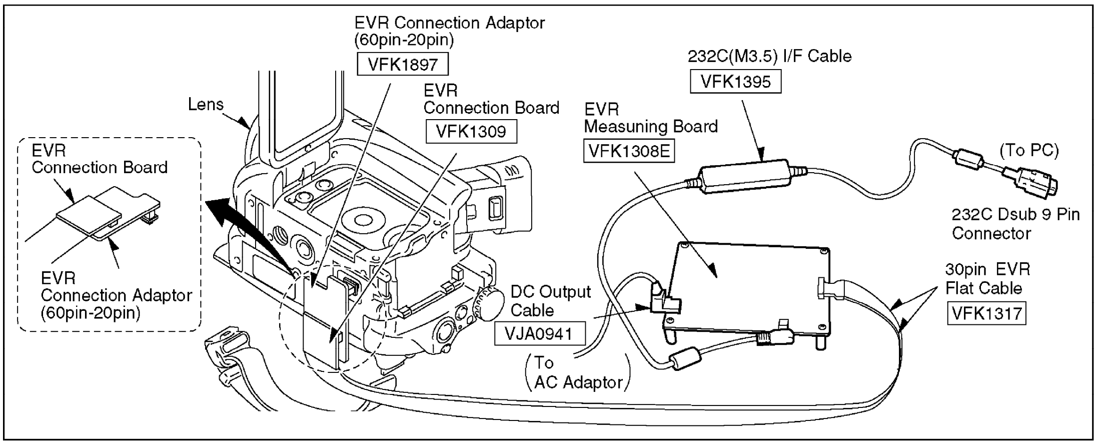
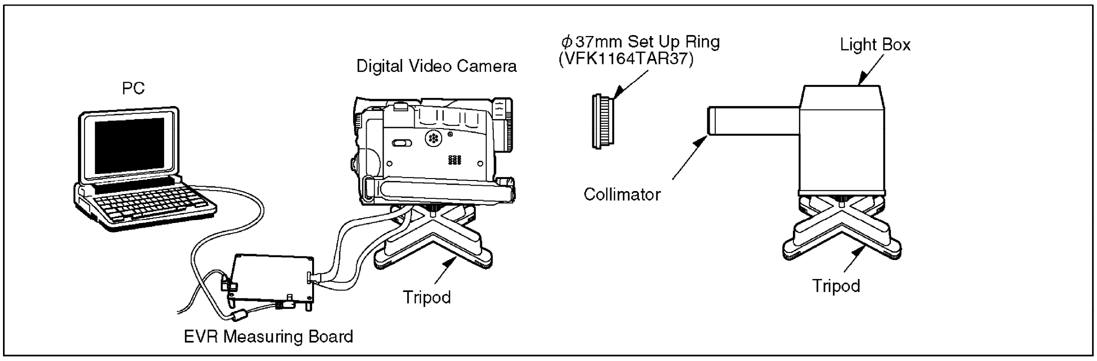
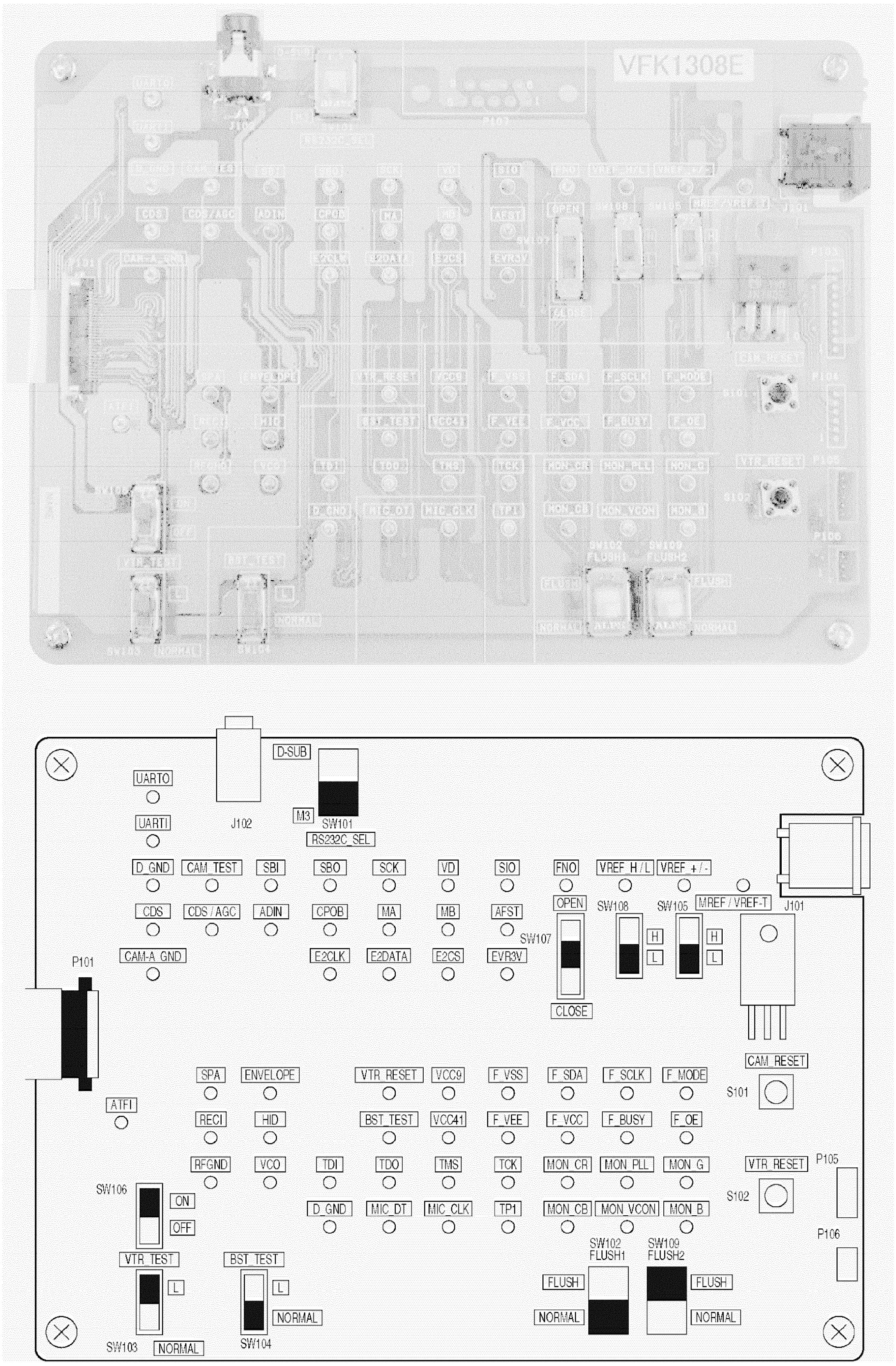

EVR Connection Adaptor
(60pin-20pin)
VFK1897
Lens
EVR
Connection Board
VFK1309
EVR
Measuning Board
VFK1308E
232C(M3.5) I/F Cable
VFK1395
(To PC)
232C Dsub 9 Pin
Connector
30pin EVR
Flat Cable
VFK1317
EVR
Connection Board
EVR
Connection Adaptor
(60pin-20pin)
DC Output
Cable
VJA0941
To
AC Adaptor

Fig. E3 Rough image of set-up connection


PC
Digital Video Camera
ϕ37mm Set Up Ring
(VFK1164TAR37)
Light Box
Collimator
Tripod
Tripod
EVR Measuring Board

Ref	Name	Parts No.	Q'ty	Remarks
1	DV Camcorder	---	1	The Camcorder being adjusted.
2	Personnel Computer	---	1	With Tatsujin Software.
3	AC Adaptor	---	2	The AC Adaptor for DV Camcorder. The AC Adaptor for M. Board.
4	DC output Cable	--- VJA0941	2	The AC Adaptor for DV Camcorder. The AC Adaptor for M. Board.
5	232C (M3.5) I/F Cable	VFK1395	1	
6	Measuring Board	VFK1308E	1	
7	30 pin Flat Cable	VFK1317	2	
8	Step Up Ring	VFK1164TAR37	1	For Collimator 37mm
9	Connection Board	VFK1309	1	
10	Connection Adaptor (60-20pin)	VFK1897	1	
11	TATSUJIN PC-Adjustment Program	VF0D2003AV30	1	

Fig. E4


VFK1308E
D-SUB
UARTO
UARTI
J102
M3
SW101
RS232C_SEL
D_GND
CAM_TEST
SBI
SBO
SCK
VD
SIO
FNO
VREF_H/L
VREF_+/-
CDS
CDS/AGC
ADIN
CPOB
MA
MB
AFST
OPEN
SW108
SW105
MREF/VREF-T
J101
H
L
H
L
SW107
P101
CAM-A_GND
E2CLK
E2DATA
E2CS
EVR3V
CLOSE
CAM_RESET
SPA
ENVELOPE
VTR_RESET
VCC9
F_VSS
F_SDA
F_SCLK
F_MODE
S101
ATFI
RECI
HID
BST_TEST
VCC41
F_VEE
F_VCC
F_BUSY
F_OE
RFGND
VCO
TDI
TDO
TMS
TCK
MON_CR
MON_PLL
MON_G
VTR_RESET
P105
SW106
ON
OFF
D_GND
MIC_DT
MIC_CLK
TP1
MON_CB
MON_VCON
MON_B
S102
P106
SW102
FLUSH1
SW109
FLUSH2
VTR_TEST
BST_TEST
L
L
FLUSH
FLUSH
NORMAL
NORMAL
NORMAL
SW103
NORMAL
SW104

(Extension cables (VFK1317 × 2pcs) ----- Measuring Board (VFK1308E) ----- 232C I/F Cable (VFK1395))

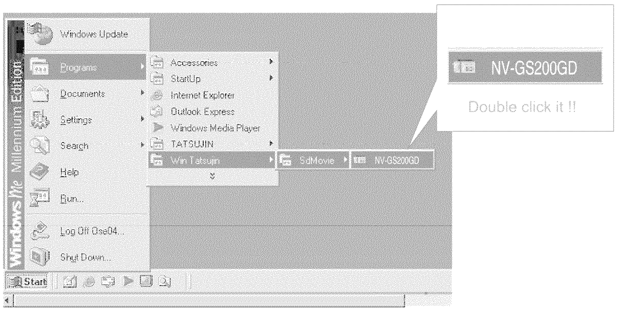
7.3. SET UP PC-EVR ADJUSTMENT PROGRAM

1. Turn on the PC and install the TATSUJIN Adjustment Program into the

PC.

2. **TATSUJIN PC-Adjustment Program start in the following procedure.**
   PC Menu : [Start] → [Program] → [win Tatsujin] → [DV Movie] → [NV-GS200 Series]

Fig. E5-1


Windows Me Millennium Edition
Windows Update
Programs
Documents
Settings
Search
Help
Run...
Log Off Ose04...
Shut Down...
Start
Accessories
StartUp
Internet Explorer
Outlook Express
Windows Media Player
TATSUJIN
Win Tatsujin
SdMovie
NV-GS200GD
NV-GS200GD

Double click it !!

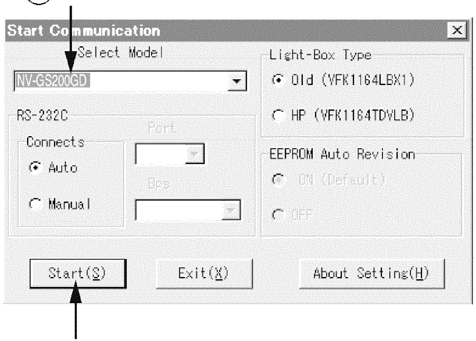
The main menu display will be displayed.

3. **Select the desired model.**

4. **Turn on the camcorder. Then, click “Start.”**

Fig. E5-2

① Select the desired model.


Start Communication
Start(S)
Exit(X)
About Setting(H)

Select Model: NV-GS200GD

Light-Box Type
● Old (VFK1164LBX1)
○ HP (VFK1164TDVLB)

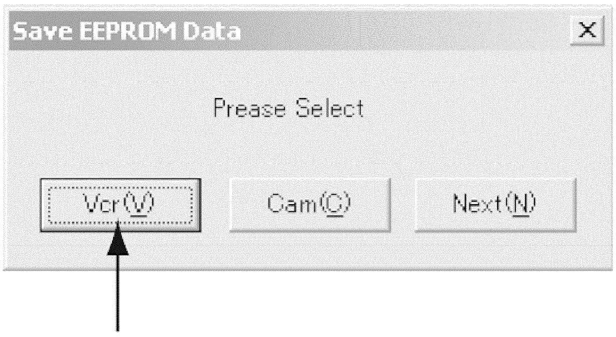
RS-232C
Connects
● Auto
○ Manual
Port
Bps

EEPROM Auto Revision
● ON (Default)
○ OFF

② Click to start.

5. **The communication is complete, and the dialog will appear.**
   Then, click “VCR (V) or Cam (C)” to save the EEPROM data,

Fig. E5-3


Save EEPROM Data
Vcr(V)
Cam(C)
Next(N)

Prease Select

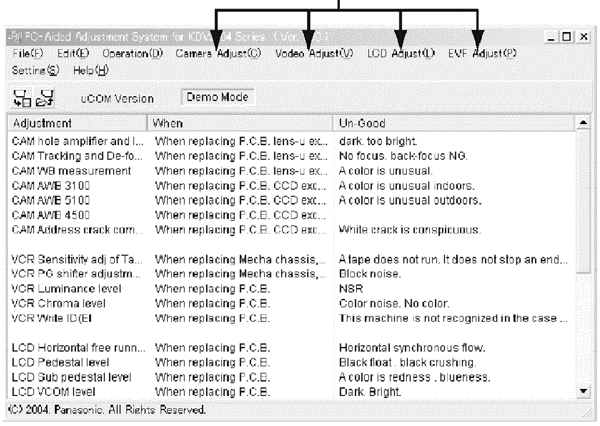
③ Click.

6. **Saving for EEPROM data is complete, menu will appear.**

To perform each adjustment, display the adjustment menu by selecting the desired menu from "Camera Adjust," "Video Adjust," "LCD Adjust" or "EVF Adjust" and select each adjustmentitem.

Fig. E5-4

④ Select the desired menu.


PC-Aided Adjustment System for KDV2004 Series (Ver.)
File(F)
Edit(E)
Operation(D)
Camera Adjust(C)
Vodeo Adjust(V)
LCD Adjust(L)
EVF Adjust(P)
Setting(S)
Help(H)
uCOM Version
Demo Mode

Adjustment	When	Un-Good
CAM hole amplifier and l...	When replacing P.C.B. lens-u ex...	dark. too bright.
CAM Tracking and De-fo...	When replacing P.C.B. lens-u ex...	No focus. back-focus NG.
CAM WB measurement	When replacing P.C.B. lens-u ex...	A color is unusual.
CAM AWB 3100	When replacing P.C.B. CCD exc...	A color is unusual indoors.
CAM AWB 5100	When replacing P.C.B. CCD exc...	A color is unusual outdoors.
CAM AWB 4500	When replacing P.C.B. CCD exc...	
CAM Address crack com...	When replacing P.C.B. CCD exc...	White crack is conspicuous.
VCR Sensitivity adj of Ta...	When replacing Mecha chassis,...	A tape does not run. It does not stop an end...
VCR PG shifter adjustm...	When replacing Mecha chassis,...	Block noise.
VCR Luminance level	When replacing P.C.B.	NSR
VCR Chroma level	When replacing P.C.B.	Color noise. No color.
VCR Write ID(EI	When replacing P.C.B.	This machine is not recognized in the case ...
LCD Horizontal free runn...	When replacing P.C.B.	Horizontal synchronous flow.
LCD Pedestal level	When replacing P.C.B.	Black float . black crushing.
LCD Sub pedestal level	When replacing P.C.B.	A color is redness . blueness.
LCD VCOM level	When replacing P.C.B.	Dark. Bright.

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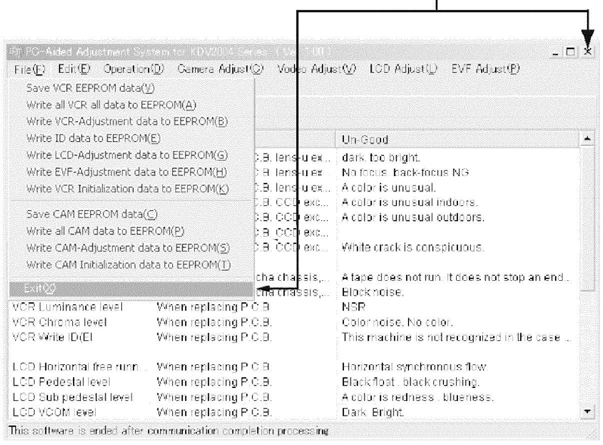
Note:
The adjustment data is stored to the EEPROM IC after each adjustment.

7. After adjustment, to end the software, select "Exit" in File menu or close the window.

Fig. E5-6

⑤ Select "Exit" or close the window.


PC-Aided Adjustment System for KDV2004 Series (Ver. 1.00)
File(F)
Edit(E)
Operation(D)
Camera Adjust(C)
Vodeo Adjust(V)
LCD Adjust(L)
EVF Adjust(P)
Save VCR EEPROM data(V)
Write all VCR all data to EEPROM(A)
Write VCR-Adjustment data to EEPROM(B)
Write ID data to EEPROM(E)
Write LCD-Adjustment data to EEPROM(G)
Write EVF-Adjustment data to EEPROM(H)
Write VCR Initialization data to EEPROM(K)
Save CAM EEPROM data(C)
Write all CAM data to EEPROM(P)
Write CAM-Adjustment data to EEPROM(S)
Write CAM Initialization data to EEPROM(T)
Exit(X)

		Un-Good
	.B. lens-u ex...	dark. too bright.
	.B. lens-u ex...	No focus. back-focus NG
	.B. lens-u ex...	A color is unusual.
	.B. CCD exc...	A color is unusual indoors.
	.B. CCD exc...	A color is unusual outdoors.
	.B. CCD exc...	
	.B. CCD exc...	White crack is conspicuous.
	cha chassis,...	A tape does not run. It does not stop an end...
	cha chassis,...	Block noise.
VCR Luminance level	When replacing P.C.B.	NSR
VCR Chroma level	When replacing P.C.B.	Color noise. No color.
VCR Write ID(EI	When replacing P.C.B.	This machine is not recognized in the case ...
LCD Horizontal free runn...	When replacing P.C.B.	Horizontal synchronous flow.
LCD Pedestal level	When replacing P.C.B.	Black float . black crushing.
LCD Sub pedestal level	When replacing P.C.B.	A color is redness . blueness.
LCD VCOM level	When replacing P.C.B.	Dark. Bright.

This software is ended after communication completion processing

7.4. INITIAL GUIDELINE

The table below shows which adjustments are necessary according to the unit parts and individual parts to be replaced. Make sure to perform these adjustments shown below as necessary.

Replacement Parts Adjustment Item		SUB C.B.A.	MAIN C.B.A.	IC307 (EEPROM)	IC2006 (EEPROM)	LENS UNIT	Prism UNIT	Iris UNIT	4ht Moving Frame UNIT	CYLINDER UNIT	MAIN CHASSIS UNIT	LCD Panel	EVF C.B.A.	
Camera	CAM hole amplifier / Iris PWM / ND hole amplifier / ND Iris PWM	○		○		○	○	○						
	CAM Tracking and De-focus	○		○	○	○	○	○	○					
	CAM Revision CCD scratch	○		○			○							
	CAM ALC adjustment	○		○		○	○	○						
	CAM AWB adjustment	○		○			○							
Video	VCR Sensitivity ADJ. of Tape sensors		○		○						○			
	VCR PG shifter adjustment		○		○					○	○			
	VCR Luminance level		○		○									
	VCR Chroma level		○		○									
LCD	LCD Contrast		○		○							○		
	LCD Pedestal level		○		○							○		
	LCD PLL		○		○							○		
	LCD COM bias		○		○							○		
	LCD COM level		○		○							○		
	LCD White balance		○		○							○		
EVF	LED Rank Adjustment		○		○								○	

Note : ○ : Adjustment Item

8. MECHANICAL ADJUSTMENT PROCEDURES

8.1. ADJUSTMENT ITEM

Item	**Adjustment at the time of the part exchange**		
	Half finished goods mechanism	**Clyinder**	**Remarks**
Linearlty adjustment& BER value confirmation	○	○	

8.2. ADJUSTMENT PROCEDURES

● Linearlty adjustment & BER value confirmation

1. **Remove the mechanism adjustment cover of tis machine as shown in Fig. D1.**
2. **The spcial tool at the time of electricity adjustment is connected.**
   Reference of the connection figure of electricity adjustment.
3. **The enbelope detection spcial tool board (VFK1641) is connected to EVR adjustment board as shown in Fig. D2.**
4. **The enbelope detection spcial tool board is connected to oscilloscope as shown in Fig. D2.**
5. **The post is adjusted with the post driver(VFK1899) so that recycles the standard tape and the detection wave-link become a flat as shown in Fig. D3.**
   ***At the time of the clyinder unit exchange unnecessary.**
6. **The post is adjusted with the post driver so that recycles a alignment tape(VFM3010EDS) and the detection wave-link become a flat once again.**
7. **Recycling the tape that video-taped it wirh this machine after adjustment, the BER value is confirmed withthe item of the BER the item of the BER confirmation of expert soft inside.**

Fig. D1

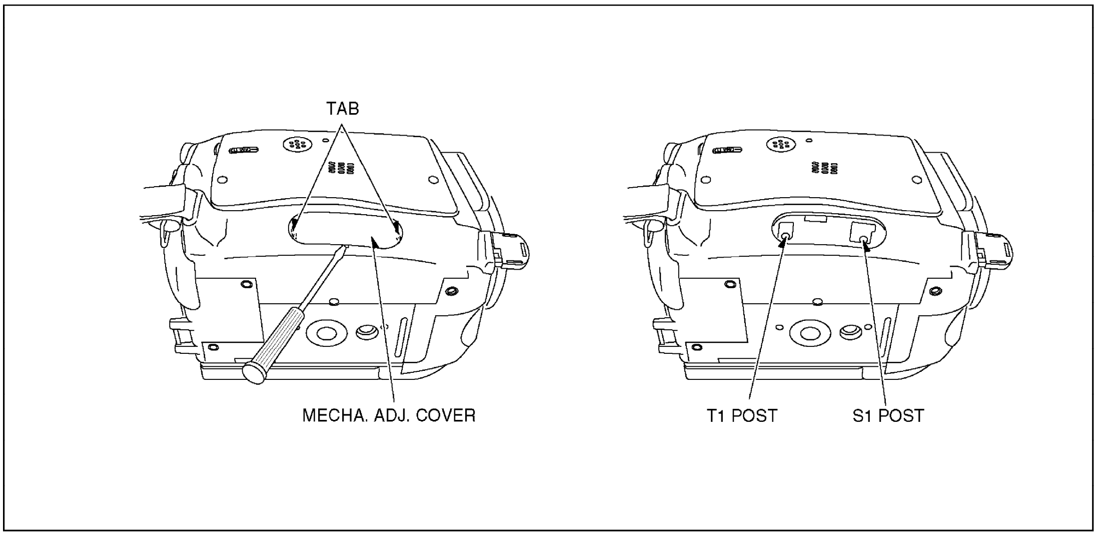


Fig. D2

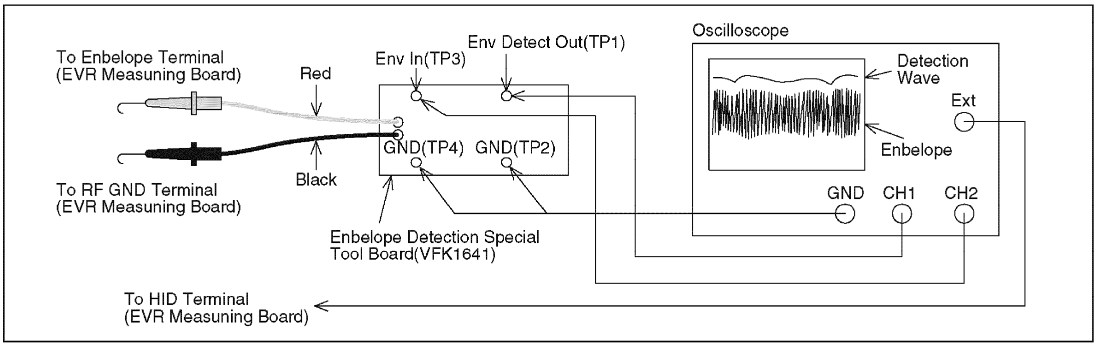
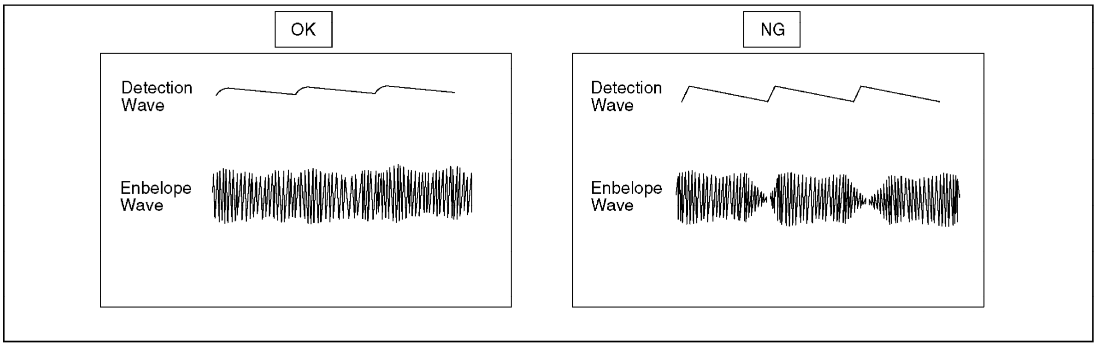

To Enbelope Terminal
(EVR Measuning Board)
Red
Env In(TP3)
Env Detect Out(TP1)
Oscilloscope
Detection
Wave
Ext
Enbelope
GND(TP4)
GND(TP2)
Black
To RF GND Terminal
(EVR Measuning Board)
GND
CH1
CH2
Enbelope Detection Special
Tool Board(VFK1641)
To HID Terminal
(EVR Measuning Board)

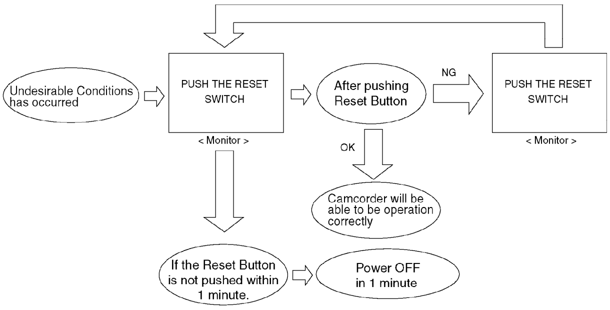
Fig. D3



9. SERVICE MODE

9.1. ERROR DISPLAY

“PUSH THE RESET SWITCH” is displayed automatically on the EVF or the LCD Monitor when an undesirable condition has occured.


Undesirable Conditions
has occurred
PUSH THE RESET
SWITCH
< Monitor >
After pushing
Reset Button
NG
PUSH THE RESET
SWITCH
< Monitor >
OK
Camcorder will be
able to be operation
correctly
If the Reset Button
is not pushed within
1 minute.
Power OFF
in 1 minute

Note:
When "PUSH THE RESET SWITCH" is displayed repeatedly, required.
Check the Error Code which is listed in the Service Menu.

9.2. SERVICE MENU

When abnormal detection contents are confirmed a When I do the following operation automatic diagnosis cord is displayed. (Service mode)
This function displays the following items in the Service Menu.

- ***1 ... Mechanism lock code record**
  The current lock code, the last lock code and the lock code before last are displayed.
- ***2 ... Lens motor lock code record**
  The current lock code, the last lock code and the lock code before last

are displayed.

Making the mode dial of This Machine a pc connection mode push [BACK LIGHT] button and [REW ◀◀] button and [PHOTO SHOT] button simultaneously for 3 seconds with no SD Card inserted.

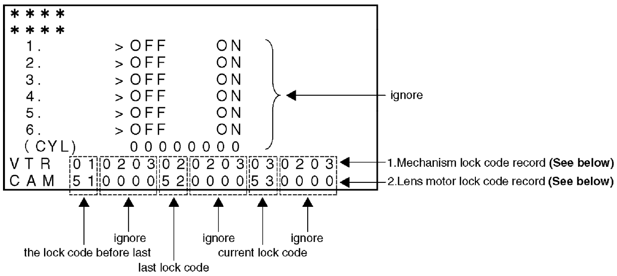
The Service Menu will be displayed.

NOTE:

In the case that a tape is included the above operation does not work.

Self diagnosis cord contents are as follows

Display position → Cord specification



```
****
****
  1.        >OFF      ON
  2.        >OFF      ON
  3.        >OFF      ON
  4.        >OFF      ON
  5.        >OFF      ON
  6.        >OFF      ON
  (CYL)      00000000
VTR  01 0203 02 0203 03 0203
CAM  51 0000 52 0000 53 0000
```

ignore
1.Mechanism lock code record (See below)
2.Lens motor lock code record (See below)
ignore
the lock code before last
last lock code
ignore
current lock code
ignore

Display contents(Self diagnosis cord contents)

Mechanism & Lens motor lock code

DISPLAY	CONDITION
01	T-REEL LOCK
02	S-REEL LOCK
03	UNLOADING LOCK
04	LOADING LOCK
05	SYLINDER
51	ZOOMMOTOR LOCK
52	FOCUSMOTOR LOCK

Turn off the power supply after confirmation,

Please do the error cord backup record the clear after repair completion.

CLEAR METHOD

Making the mode dial of This Machine a pc connection mode push [BACK LIGHT] button and [REW ◀◀] button and [RECORDING START/STOP] button simultaneously for 3 seconds (with no SDCard inserted).

NOTE:

1. **When an Error Display “PUSH THE RESET SWITCH” on the monitor, it is not necessary to push the MENU button to enter the Service Menu.**

2. Do not operate items 1 ~ 6 and “(CYL)“ in the Service Menu.

3. To exit the Service Menu, unplug the AC Cord.

10. ABBREVIATIONS

11. BLOCK DIAGRAM

11.1. OVERALL BLOCK DIAGRAM

11.2. CAMERA 1 BLOCK DIAGRAM (SENSOR BLOCK DIAGRAM)

11.3. CAMERA 2 BLOCK DIAGRAM (PROCESS BLOCK DIAGRAM)

11.4. LENS DRIVE BLOCK DIAGRAM

11.5. CONTROL 1 BLOCK DIAGRAM

11.6. CONTROL 2 BLOCK DIAGRAM

11.7. VIDEO BLOCK DIAGRAM

11.8. DSC BLOCK DIAGRAM (NV-GS200GD ONLY)

11.9. MONITOR BLOCK DIAGRAM

12. SCHEMATIC DIAGRAMS

12.1. INTERCONNECTION SCHEMATIC DIAGRAM

12.2. SIDE (L) SCHEMATIC DIAGRAM

12.3. CASSETTE COVER UNIT SCHEMATIC DIAGRAM

12.4. REAR OPERATION UNIT SCHEMATIC DIAGRAM

12.5. SIDE (R) / R RELAY / LCD DET / SD OPEN SCHEMATIC DIAGRAM

12.6. SIDE (R) VTR OPERATION FLEX. UNIT SCHEMATIC DIAGRAM

12.7. MF SENSOR SCHEMATIC DIAGRAM (NV-GS200GD ONLY)

12.8. EVF SCHEMATIC DIAGRAM

12.9. PL FLEX. CARD SCHEMATIC DIAGRAM

12.10. SD HOLDER SCHEMATIC DIAGRAM

12.11. CCD FLEX. CARD SCHEMATIC DIAGRAM

12.12. FRONT / FLASH SW FLEX. CARD SCHEMATIC DIAGRAM

12.13. JACK SCHEMATIC DIAGRAM

12.14. MONITOR SCHEMATIC DIAGRAM (NV-GS120GD ONLY)

12.15. MONITOR SCHEMATIC DIAGRAM (NV-GS200GD ONLY)

12.16. SUB (SUB CONNECTION) SCHEMATIC DIAGRAM

12.17. SUB (SUB POWER) SCHEMATIC DIAGRAM

12.18. SUB (MPEG) SCHEMATIC DIAGRAM (NV-GS200GD ONLY)

12.18.1. DSC I / O TABLE

12.19. SUB (LENS DRIVE) SCHEMATIC DIAGRAM

12.20. SUB (CAMERA) SCHEMATIC DIAGRAM

12.20.1. PROCESS I / O TABLE

12.21. MAIN (MAIN CONNECTION) SCHEMATIC DIAGRAM

12.22. MAIN (AVIO) SCHEMATIC DIAGRAM

12.23. MAIN (EX INPUT)SCHEMATIC DIAGRAM

12.24. MAIN (LCD) SCHEMATIC DIAGRAM

12.25. MAIN (DRIVE) SCHEMATIC DIAGRAM

12.26. MAIN (VIDEO) SCHEMATIC DIAGRAM

12.27. MAIN (POWER) SCHEMATIC DIAGRAM

12.28. MAIN (CONTROL) SCHEMATIC DIAGRAM

12.28.1. CONTROL DC VOLTAGE CHART (SP MODE)

12.28.2. CONTROL I / O TABLE

13. CIRCUIT BOARD ASSEMBLIES

13.1. SIDE (L) C.B.A.

13.2. EVF C.B.A.

13.3. FLASH SW C.B.A. (NV-GS200GD ONLY)

13.4. SD OPEN C.B.A.

13.5. SIDE (R) (LCD DET) C.B.A.

13.6. SIDE (R) (R RELAY) C.B.A.

13.7. SD HOLDER C.B.A.

13.8. JACK C.B.A.

13.9. CCD FLEX. CARD C.B.A.

13.10. FRONT C.B.A.

13.11. MONITOR C.B.A. (NV-GS120GD ONLY)

13.12. MONITOR C.B.A. (NV-GS200GD ONLY)

13.13. SUB C.B.A. (COMPONENT SIDE) (NV-GS120GD ONLY)

13.14. SUB C.B.A. (FOIL SIDE) (NV-GS120GD ONLY)

13.15. SUB C.B.A. (COMPONENT SIDE) (NV-GS200GD ONLY)

13.16. SUB C.B.A. (FOIL SIDE) (NV-GS200GD ONLY)

13.17. MAIN C.B.A. (COMPONENT SIDE)

13.18. MAIN C.B.A. (FOIL SIDE)

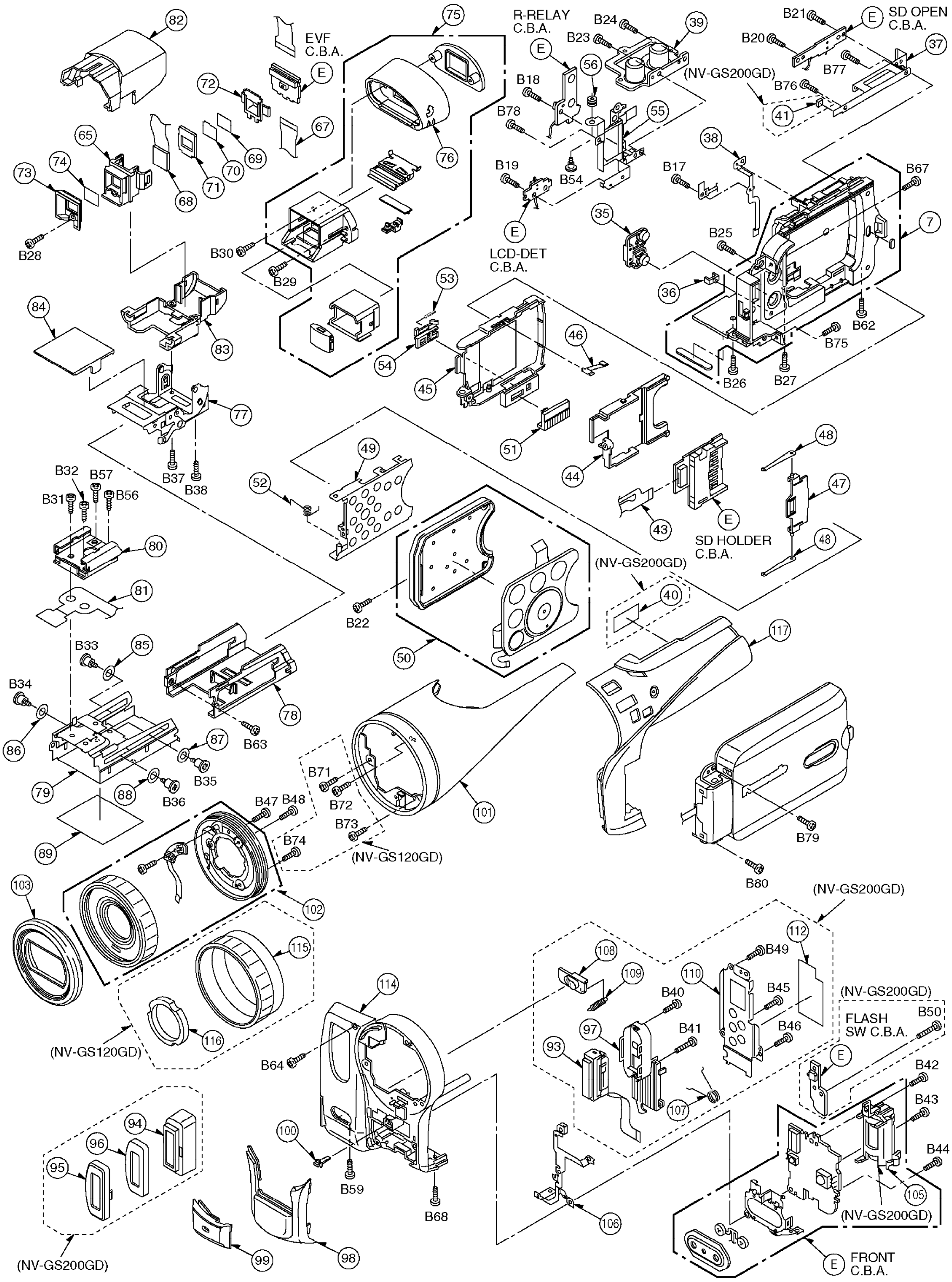
14. CHECKING POINT OF THE CSP IC

14.1. CHECKING POINT TABLE

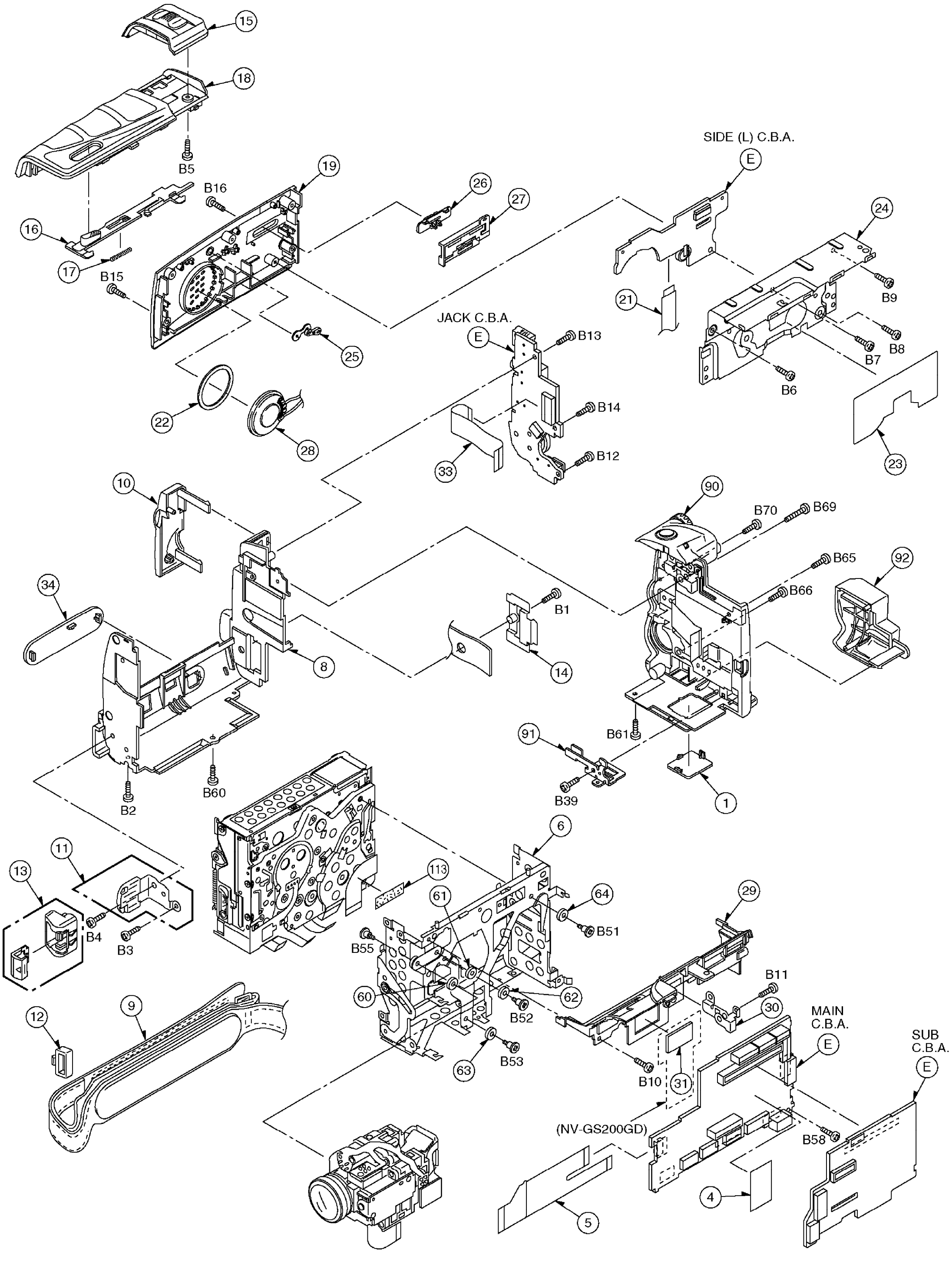
14.2. WAVEFORM TABLE (PLAY MODE)

15. EXPLODED VIEWS

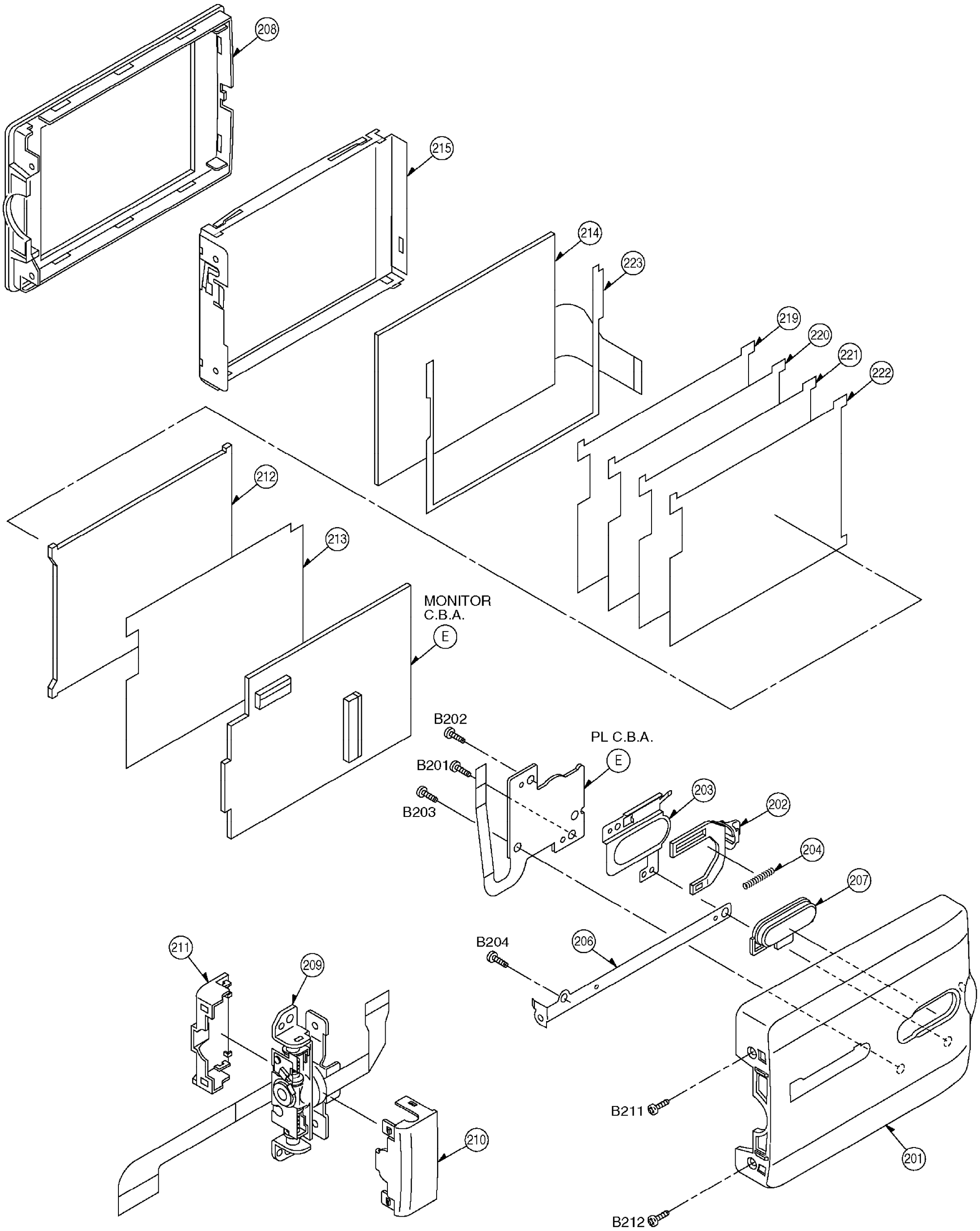
15.1. FRAME & CASING SECTION (1)


82
EVF C.B.A.
E
75
R-RELAY C.B.A.
E
B24
39
B23
B21
E
SD OPEN C.B.A.
B20
37
72
56
(NV-GS200GD)
B77
B18
B76
41
67
65
76
B78
55
74
69
70
73
68
71
38
B67
B19
B17
B54
E
35
7
B28
B30
B29
LCD-DET C.B.A.
B25
53
36
84
B62
46
83
54
B75
45
B26
B27
77
51
48
44
49
B32
B57
B37
B38
52
B31
B56
47
43
E
SD HOLDER C.B.A.
80
48
(NV-GS200GD)
81
40
B22
117
50
B33
85
B34
78
87
B63
86
B35
B71
B72
101
79
88
B36
B47
B48
B73
B79
89
B74
(NV-GS120GD)
103
102
B80
(NV-GS200GD)
112
108
B49
115
109
110
114
B40
B45
(NV-GS200GD)
FLASH SW C.B.A.
B50
B41
97
B46
93
E
116
(NV-GS120GD)
B64
B42
107
B43
100
94
96
B44
95
B59
105
B68
106
(NV-GS200GD)
FRONT C.B.A.
E
99
98
(NV-GS200GD)

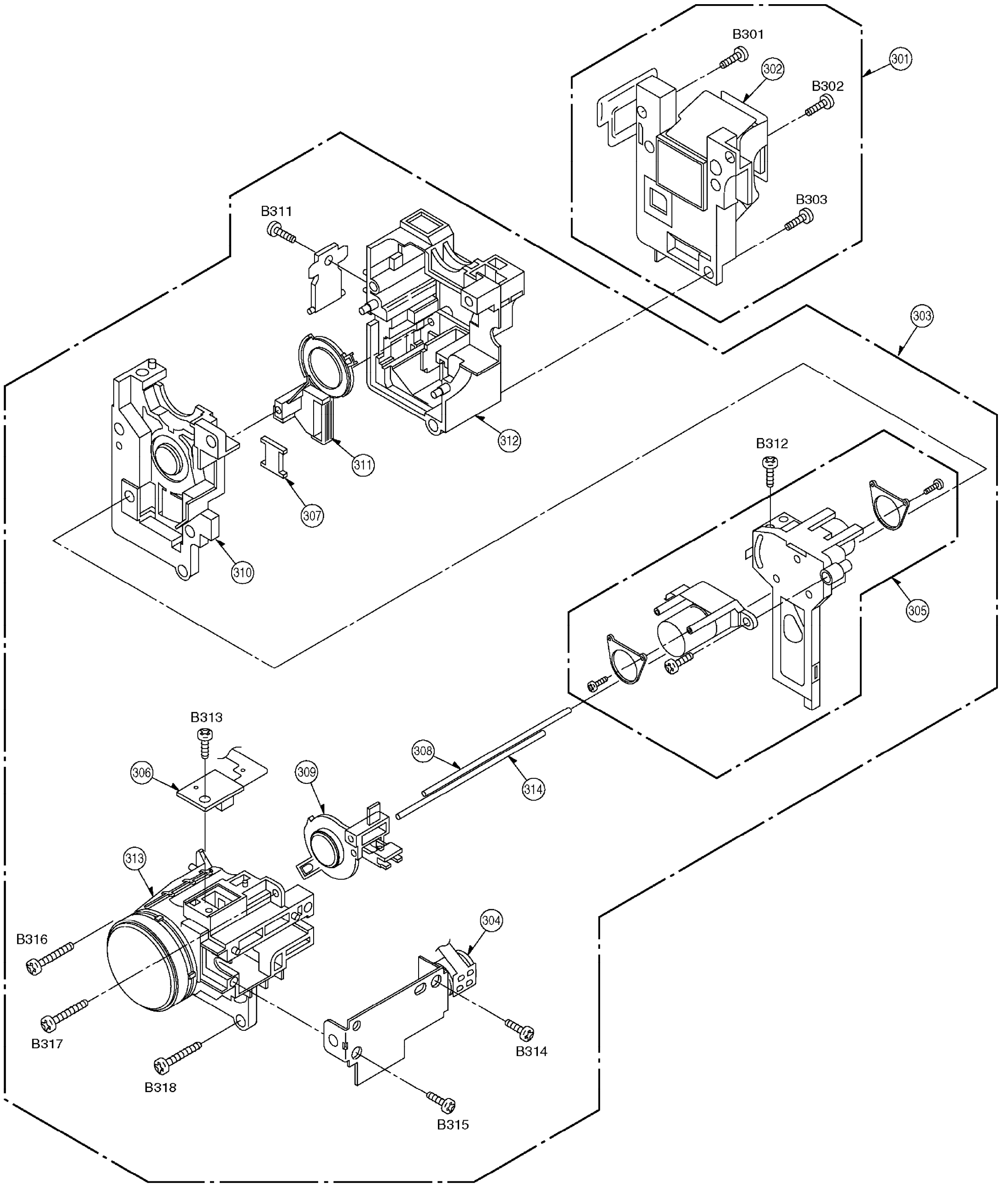
15.2. FRAME & CASING SECTION (2)


15
18
B5
19
B16
26
27
SIDE (L) C.B.A.
E
24
16
17
B15
21
B9
JACK C.B.A.
E
B13
25
B8
B7
B6
22
28
B14
33
B12
23
10
90
B70
B69
B65
92
34
B66
B1
8
14
91
B61
B2
B60
B39
1
6
11
13
113
61
64
B51
29
B4
B3
B55
B11
12
9
60
62
30
B52
MAIN
C.B.A.
E
SUB
C.B.A.
E
63
B53
B10
31
(NV-GS200GD)
B58
4
5

15.3. LCD SECTION


208
215
214
223
219
220
221
222
212
213
MONITOR
C.B.A.
E
B202
PL C.B.A.
E
B201
B203
203
202
204
207
B204
206
211
209
201
210
B211
B212

15.4. CAMERA LENS SECTION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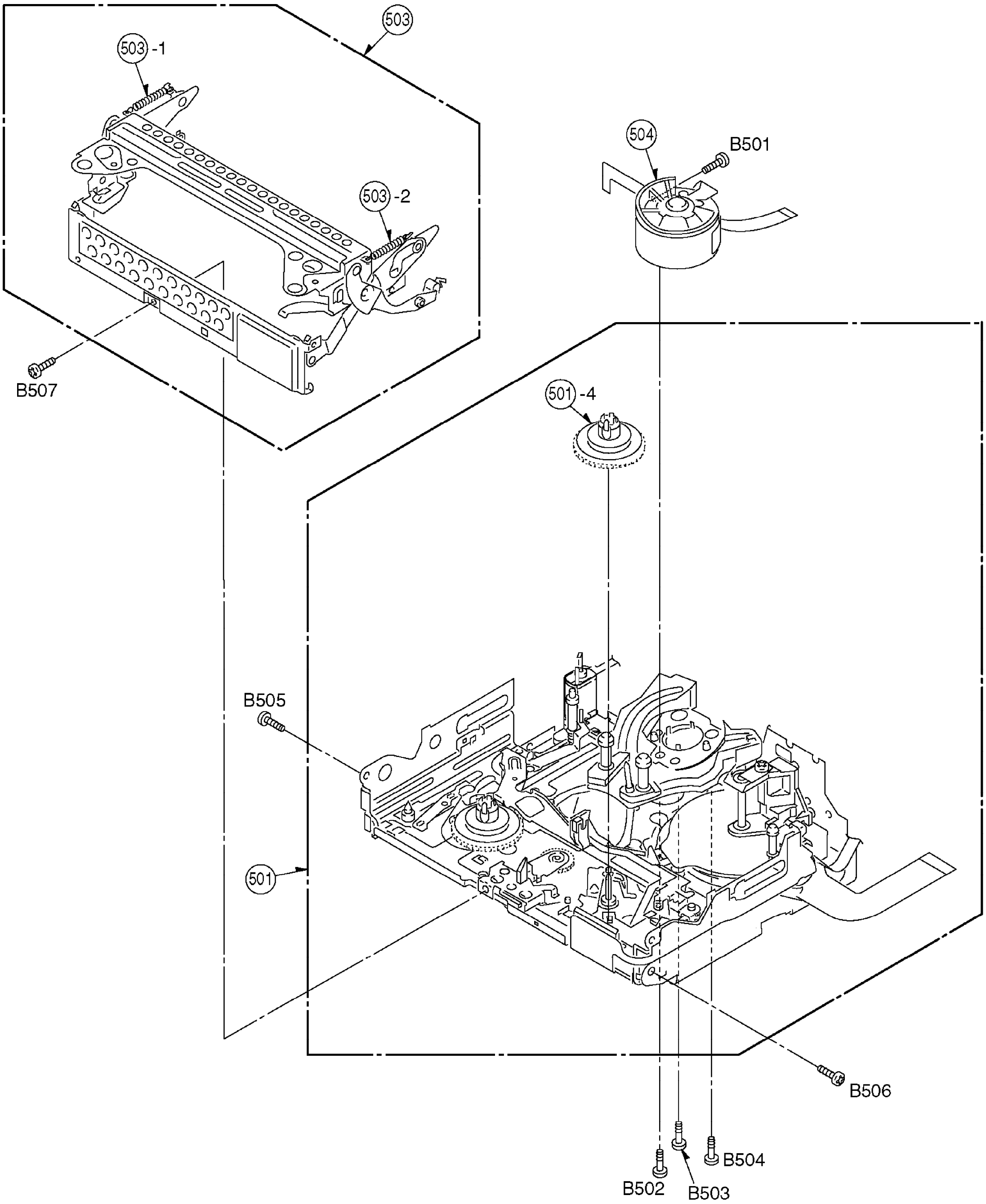
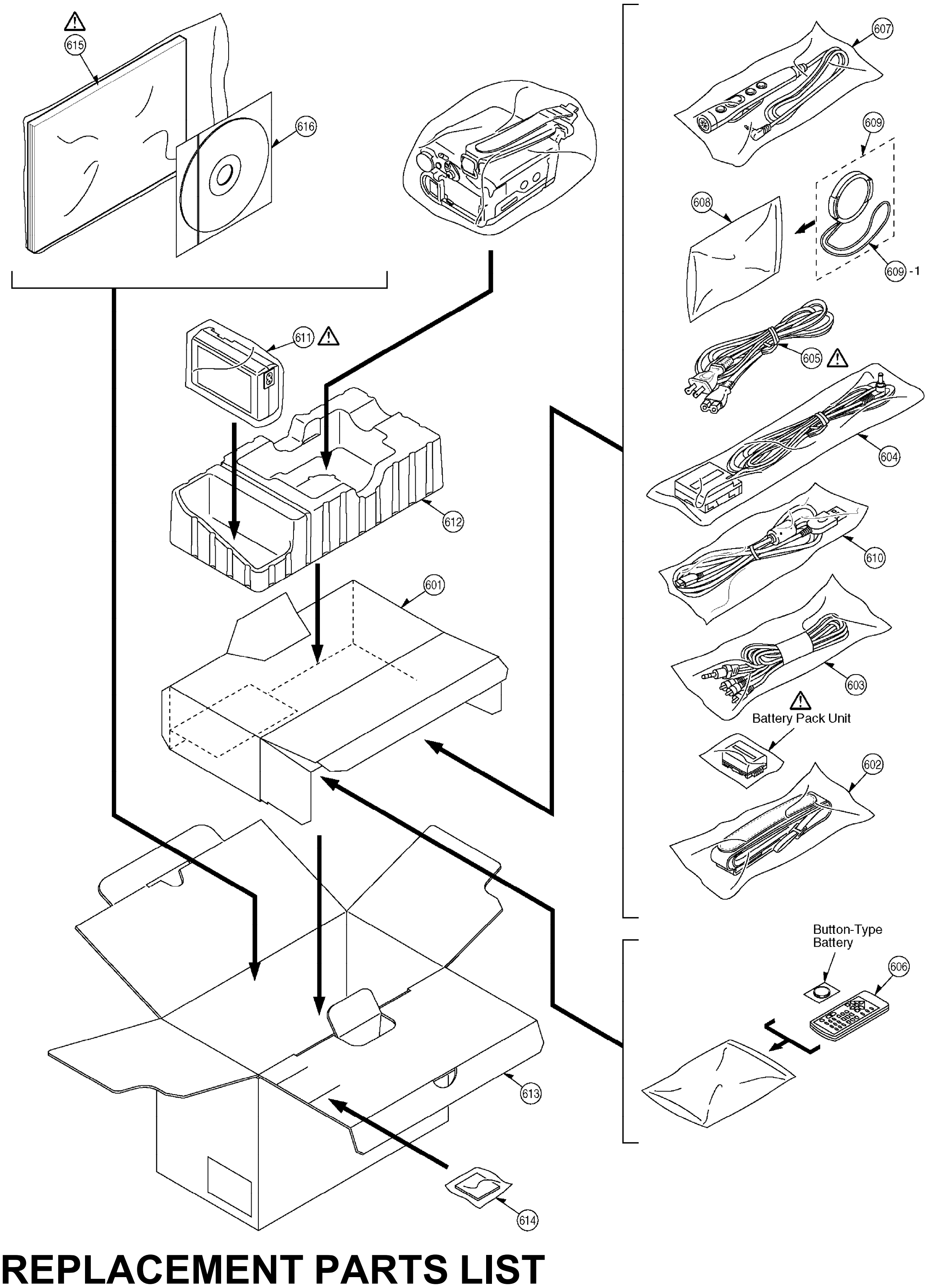
302
301
B302
B303
B311
303
312
311
310
307
B312
305
B313
306
309
308
314
313
B316
304
B317
B314
B318
B315

15.5. VCR MECHANISM SECTION


503
503-1
503-2
B507
504
B501
501-4
B505
501
B506
B502
B503
B504

15.6. PACKING PARTS & ACCESSORIES SECTION


615
616
611
612
601
607
609
608
609-1
605
604
610
603
Battery Pack Unit
602
Button-Type Battery
606
613
614

16. REPLACEMENT PARTS LIST

16.1. FRAME & CASING SECTION (1), (2) PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Definition of Parts supplier:
Parts without mark in the Remarks column are supplied from SPC.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	VKF3861	EVR COVER	1	
4	VGQ7730	INSULATION SHEET	1	
5	VWJ1696	FRONT	FPC	1
5	VWJ1708	FRONT	FPC	1
6	VYK1D22	MECHA. FRAME U.	1	
7	VYK1H80	R BASE U.	1	
8	VKM6471	SIDE CASE L	1	
9	VYC0910	GRIP BELT U.	1	
10	VKF3859	JACK COVER (L)	1	
11	VYK1D23	GRIP BELT ANGLE (L) U.	1	
12	VGQ7161	GRIP BELT PIECE	1	
13	VKF3767	LOCK PIECE COVER	1	
14	VMP7922	GRIP BELT ANGLE (REAR)	1	
15	N9ZZ00000241	ZOOM OP U.	1	
16	VML3855	CASSETTE LOCK LEVER	1	
17	VMB3856	CASSETTE LOCK SPRING	1	
18	VKM6472	CASETTE COVER (TOP)	1	NV-GS200GD-S
18	VKM6478	CASETTE COVER (TOP)	1	NV-GS120GD-S
19	VKM6473	CASETTE COVER (SIDE)	1	
21	VWJ1697	SIDE	L FPC	1
22	VGQ5908	SPEAKER SHEET	1	
23	VGQ7701	SHEET	1	
24	VMP7883	CASSETTE PLATE	1	
25	VGU9307	RESET BUTTON	1	
26	VGU9572	MODE SELECT KNOB	1	
27	VGU9573	KNOB HOLDER	1	
28	L0AA02A00036	SPEAKER U.	1	
29	VKM6412	TOP CASE	1	
30	VSC5564	CASE (L) EARTH ANGLE	1	
31	VGQ7923	HEATING SHEET	1	NV-GS200GD-S
33	VWJ1704	JACK	FPC	1
34	VKF3862	MECHA. ADJ. COVER	1	
35	VGU9570	REC BUTTON	1	
36	VGL0849	POWER PANEL LIGHT	1	
37	VMP7917	REAR HOLD PLATE	1	
38	VSC5571	SD EARTH PLATE	1	
39	VMP7916	TRIPOD PLATE	1	
40	VMP7918	HEAT DISSIPATION PLATE	1	
41	VGQ7922	SR PORON	1	NV-GS200GD-S
43	VWJ1700	SD	FPC	1
44	VGQ7803	SD HOLDER PIECE	1	
45	VGQ7804	SD HOLDER BASE	1	
46	VMC1851	SD DETECT SW SPRING	1	
47	VGQ7218	SD SLIDE COVER	1	
48	VMP7635	SD SLIDE LINK	2	
49	VXA7799	SD SUPPORT PLATE U.	1	
50	VYK1J12	SD DOOR U.	1	
51	VGU9571	SD OPEN KNOB	1	
52	VMB3868	SD DOOR SPRING	1	
53	VMB3755	SD OPEN KNOB SPRING	1	
54	VGQ7805	SD LOCK PIECE	1	
55	VMP7915	HINGE SUPPORT PLATE	1	
56	VMG1107	DUMPER RUBBER	1	
60	VMG1107	DUMPER RUBBER	1	
61	VMG1107	DUMPER RUBBER	1	
62	VMG1107	DUMPER RUBBER	1	
63	VMG1107	DUMPER RUBBER	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
64	VMG1107	DUMPER RUBBER	1	
65	VGQ7782	LCD HOLDER	1	
67	VWJ1699	EVF FPC	1	
68	L5BDDXH00016	LCD PANEL	1	
69	VGL1088	BL DIFFUSION SHEET	1	
70	VGL1089	BL PRISM SHEET	1	
71	VGQ7785	LCD PIECE	1	
72	VGQ7784	BL PIECE	1	
73	VGQ7783	LENS PRISM SHEET HOLD	1	
74	VGL1090	LENS PRISM SHEET	1	
75	VYK1D11	EVF VIEW ADJ. U.	1	
76	VMG1600	EYE CAP	1	
77	VYK1D09	EVF HINGE U.	1	
78	VGQ7780	SLIDE FRAME	1	
79	VMC1898	EVF SUPPORT PLATE	1	
80	K1FB108H0014	HOT SHOE	1	NV-GS200GD-S
80	VXA7632	COLD SHOE	1	NV-GS120GD-S
81	VWJ1698	HOT SHOE FLEX.	1	NV-GS200GD-S
82	VKM6470	EVF CASE (UPPER)	1	
83	VKM6403	EVF CASE (LOWER)	1	
84	VGQ7788	SLIDE MASK PIECE	1	
85	VGQ7249	SLIDE SPACER	1	
86	VGQ7249	SLIDE SPACER	1	
87	VGQ7249	SLIDE SPACER	1	
88	VGQ7249	SLIDE SPACER	1	
89	VGQ7909	TAPE	1	
90	N9ZZ00000243	REAR OPERATION U.	1	NV-GS200GD-S
90	N9ZZ00000253	REAR OPERATION U.	1	NV-GS120GD-S
91	VMP7923	SHOULDER BELT ANGLE	1	
92	VKF3860	REAR JACK COVER	1	
93	EFN-MVS34	FLASH FLEX. U.	1	NV-GS200GD-S
94	VGQ7793	FL CASE (FRONT)	1	NV-GS200GD-S
95	VGQ7794	FL CASE	1	NV-GS200GD-S
96	VGQ7795	FL CASE (INSIDE)	1	NV-GS200GD-S
97	VGQ7796	FL CASE (REAR)	1	NV-GS200GD-S
98	VYK1D14	FRONT CASE U.	1	NV-GS200GD-S
98	VYK1E21	FRONT CASE U.	1	NV-GS120GD-S
99	VKW3179	SENSOR WINDOW	1	
100	VGL1091	TALLY PANEL LIGHT	1	
101	VGK3013	LENS CASE	1	NV-GS200GD-S
101	VGK3014	LENS CASE	1	NV-GS120GD-S
102	VYK1D16	MF U.	1	NV-GS200GD-S
102	VDW0911Q	MF COVER	1	NV-GS120GD-S
103	VYK1D17	LENS HOOD U.	1	
105	VGQ7792	CAPACITOR HOLDER	1	NV-GS200GD-S
106	VMP7911	FRONT EARTH PLATE	1	
107	VMB3751	FL HOP UP SPRING	1	NV-GS200GD-S
108	VGU9568	FL LOCK KNOB	1	NV-GS200GD-S
109	VMB3752	FL LOCK KNOB SPRING	1	NV-GS200GD-S
110	VMP7912	FL GUIDE ANGLE	1	NV-GS200GD-S
112	VGQ8067	FL BARRIER	1	NV-GS200GD-S
113	VGQ6407	TAPE	1	
114	VKM6404	FRONT CASE	1	NV-GS200GD-S
114	VKM6453	FRONT CASE	1	NV-GS120GD-S
115	VGK2992	LENS CASE RING	1	NV-GS120GD-S
116	VMG1527	LENS DUMPER RUBBER	1	NV-GS120GD-S
117	VKM6408	R COVER	1	NV-GS200GD-S

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
117	VKM6451	R COVER	1	NV-GS120GD-S
B1	VHD1658	SCREW	1	
B2	XQN16+B2FN	SCREW	1	
B3	XQN16+B2FN	SCREW	1	
B4	XQN16+B4FZ	SCREW	1	
B5	XQN16+BJ4FN	SCREW	1	
B6	XQN16+BJ4FN	SCREW	1	
B7	XQN16+BJ4FN	SCREW	1	
B8	XQN16+BJ4FN	SCREW	1	
B9	XQN16+BJ4FN	SCREW	1	
B10	XQN16+B2FN	SCREW	1	
B11	XQN16+B3FZ	SCREW	1	NV-GS200GD-S
B11	XQN16+B3FN	SCREW	1	NV-GS120GD-S
B12	XQN16+B3FZ	SCREW	1	NV-GS200GD-S
B12	XQN16+B3FN	SCREW	1	NV-GS120GD-S
B13	XQN16+BJ4FN	SCREW	1	
B14	XQN16+BJ4FN	SCREW	1	
B15	VHD1601	SCREW	1	
B16	VHD1601	SCREW	1	
B17	XQN16+B2FN	SCREW	1	
B18	XQN16+B3FZ	SCREW	1	
B19	XQN16+B3FZ	SCREW	1	
B20	XQN16+BJ4FN	SCREW	1	
B21	XQN16+BJ4FN	SCREW	1	
B22	XQN16+BJ4FN	SCREW	1	
B23	XQN16+BJ5FZ	SCREW	1	
B24	XQN16+BJ5FZ	SCREW	1	
B25	XQN16+BJ4FN	SCREW	1	
B26	XQN16+B3FZ	SCREW	1	
B27	XQN16+B3FZ	SCREW	1	
B28	XQN16+BJ4FZ	SCREW	1	
B29	XQN16+BJ5FZ	SCREW	1	
B30	XQN16+BJ5FZ	SCREW	1	
B31	XQS2+A25FN	SCREW	1	
B32	XQS2+A25FN	SCREW	1	
B33	VHD1606	SCREW	1	
B34	VHD1606	SCREW	1	
B35	VHD1606	SCREW	1	
B36	VHD1606	SCREW	1	
B37	XQN16+BJ8FN	SCREW	1	
B38	XQN16+BJ8FN	SCREW	1	
B39	XQN16+BJ5FZ	SCREW	1	
B40	XQN16+BJ6FZ	SCREW	1	NV-GS200GD-S
B41	XQN16+BJ10FN	SCREW	1	NV-GS200GD-S
B42	XQS16+AJ4FZ	SCREW	1	NV-GS200GD-S
B42	XQN16+BJ35FN	SCREW	1	NV-GS120GD-S
B43	XQN16+BJ35FN	SCREW	1	
B44	XQN16+BJ35FN	SCREW	1	
B45	XQN16+BJ35FN	SCREW	1	NV-GS200GD-S
B46	XQN16+BJ35FN	SCREW	1	NV-GS200GD-S
B47	XQN16+BJ5FN	SCREW	1	NV-GS200GD-S
B47	XQN16+BJ3FN	SCREW	1	NV-GS120GD-S
B48	XQN16+BJ5FN	SCREW	1	NV-GS200GD-S
B48	XQN16+BJ3FN	SCREW	1	NV-GS120GD-S
B49	XQN16+BJ5FN	SCREW	1	NV-GS200GD-S
B50	XQN16+BJ8FN	SCREW	1	NV-GS200GD-S

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
B51	VHD1133	SCREW	1	
B52	VHD1133	SCREW	1	
B53	VHD1133	SCREW	1	
B54	VHD1353	SCREW	1	
B55	VHD1353	SCREW	1	
B56	VHD1526	SCREW	1	
B57	VHD1526	SCREW	1	
B58	XQN16+B3FZ	SCREW	1	
B59	XQN16+B3FZ	SCREW	1	
B60	XQN16+B3FZ	SCREW	1	
B70	XQN16+BJ8FZ	SCREW	1	
B61	XQN16+B3FZ	SCREW	1	
B62	XQN16+B3FZ	SCREW	1	
B63	XQN16+B5FZ	SCREW	1	
B64	XQN16+B5FZ	SCREW	1	
B65	XQN16+B5FZ	SCREW	1	
B66	XQN16+B5FZ	SCREW	1	
B67	XQN16+BJ4FN	SCREW	1	
B68	XQN16+BJ6FZ	SCREW	1	
B69	XQN16+BJ8FZ	SCREW	1	
B71	XQN16+BJ4FN	SCREW	1	NV-GS120GD-S
B72	XQN16+BJ4FN	SCREW	1	NV-GS120GD-S
B73	XQN16+BJ4FN	SCREW	1	NV-GS120GD-S
B74	XQN16+BJ3FN	SCREW	1	NV-GS120GD-S
B75	XQN16+BJ4FN	SCREW	1	
B76	XQN16+BJ3	SCREW	1	
B77	XQN16+BJ3	SCREW	1	
B78	XQN16+BJ3	SCREW	1	
B79	VHD1411	SCREW	1	
B80	VHD1411	SCREW	1	

16.2. LCD SECTION PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Definition of Parts supplier:
Parts without mark in the Remarks column are supplied from SPC.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
201	VYK1J25	LCD CASE (1) U. (UPPER)	1	NV-GS200GD-S
201	VYK1J29	LCD CASE (1) U. (UPPER)	1	NV-GS120GD-S
202	VGQ7799	LCD LOCK PIECE	1	
203	VMP7914	LCD LOCK PLATE	1	
204	VMB3600	LCD LOCK SPRING	1	
206	VSC5605	LCD EARTH PLATE	1	
207	VYK1H84	BL BUTTON U.	1	
208	VKM6406	LCD CASE (LOWER)	1	NV-GS200GD-S
208	VKM6452	LCD CASE (LOWER)	1	NV-GS120GD-S
209	VXD0421	LCD HINGE (1) U.	1	
210	VGQ7800	HINGE COVER (UPPER)	1	
211	VGQ7801	HINGE COVER (LOWER)	1	
212	VKW3178	POLARIZATION PLATE	1	
213	VGL1081	REFLECTION SHEET	1	
214	L5BDDYH00009	LCD PANEL U.	1	NV-GS200GD-S
214	L5BDDYH00004	LCD PANEL U.	1	NV-GS120GD-S
215	VSC5572	LCD SHIELD CASE	1	NV-GS200GD-S
215	VSC5587	LCD SHIELD CASE	1	NV-GS120GD-S
219	VGL1106	DBEF SHEET	1	NV-GS200GD-S
219	VGL1110	DBEF SHEET	1	NV-GS120GD-S
220	VGL1107	PRISM SHEET A	1	NV-GS200GD-S
220	VGL1111	PRISM SHEET A	1	NV-GS120GD-S
221	VGL1108	PRISM SHEET B	1	NV-GS200GD-S
221	VGL1112	PRISM SHEET B	1	NV-GS120GD-S
222	VGL1109	DIFFUSION SHEET	1	
223	VHD1660	SCREW	1	
B201	VHD1303	SCREW	1	
B202	VHD1303	SCREW	1	
B203	VHD1303	SCREW	1	
B204	XQN16+BJ25FN	SCREW	1	
B211	VHD1675	SCREW	1	
B212	VHD1675	SCREW	1	
	VGQ8111	MONITOR SHEET	1	

16.3. CAMERA LENS SECTION PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Definition of Parts supplier:
Parts without mark in the Remarks column are supplied from SPC.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
301	VXQ1213	PRISM U.	1	NV-GS200GD-S
301	VXQ1217	PRISM U.	1	NV-GS120GD-S
302	VEP22349A	CCD FLEX. C.B.A.	1	NV-GS200GD-S
302	VEP22349B	CCD FLEX. C.B.A.	1	NV-GS120GD-S
303	VXW0667	LENS U.	1	
304	L6HA68NC0001	ZOOM MOTOR U.	1	
305	L9ZZ00000198	IRIS U.	1	
306	VEK0G41	LENS FLEX. C.B.A. U.	1	
307	VMA9961	SIDE YOKE	1	
308	VMS7312	GUIDE POLE	1	
309	VXP2357	2ND MOVING FRAME U.	1	
310	VXQ1215	3RD FRAME U.	1	
311	VXP2359	4TH MOVING FRAME U.	1	
312	VXQ1216	MASTER FLANGE U.	1	
313	VXQ1214	MAIN FRAME U.	1	
314	VMS7312	GUIDE POLE	1	
B301	XQN16+CJ5	SCREW	1	
B302	XQN16+CJ5	SCREW	1	
B303	XQN16+CJ5	SCREW	1	
B311	XQN16+CJ5	SCREW	1	
B312	XQN16+CJ5	SCREW	1	
B313	XQN16+CJ5	SCREW	1	
B314	VHD1508	SCREW	1	
B315	VHD1508	SCREW	1	
B316	VHD1509	SCREW	1	
B317	VHD1509	SCREW	1	
B318	VHD1509	SCREW	1	

16.4. VCR MECHANISM SECTION PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Definition of Parts supplier:
Parts without mark in the Remarks column are supplied from SPC.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
501	VXA7735	MAIN CHASSISB U.	1	
501-4	VXR0401	T-REEL MOTOR	1	
503	VXA7624	CASSETTE UP U.	1	
503-1	VMB3766	CASSETTE UP SPRING	1	
503-2	VMB3766	CASSETTE UP SPRING	1	
504	VEG1659	CYLINDER U.	1	
B501	VHD1632	SCREW	1	
B502	VHD1585	SCREW	1	
B503	VHD1585	SCREW	1	
B504	VHD1585	SCREW	1	
B505	XQN14+B2FN	SCREW	1	
B506	XQN14+B2FN	SCREW	1	
B507	XQN14+B1FN	SCREW	1	

16.5. PACKING PARTS & ACCESSORIES SECTION PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Definition of Parts supplier:
Parts without mark in the Remarks column are supplied from SPC.
4. Supply of CD-ROM, in accordance with license protection, is allowable as replacement parts only for customers who accidentally damaged or lost their own.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
601	VPK2830	ACCESSORIES BOX	1	
602	VFC3506-1A	SHOULDER BELT	1	
603	K2KC4CB00009	AV CABLE	1	
604	K2GJ2DZ00017	DC CABLE	1	
605	K2CP2DA00001	AC CABLE	1	⚠
606	N2QAGC000018	REMOTE CONTROLLER	1	
607	N2QCBD000030	UNIVERSAL REMOTE CONTROLLER	1	
608	VPF1190	POLYETHYLENE BAG	1	
609	VYF2973	HOOD CAP U.	1	
609-1	VGQ7270	HOOD STRAP	1	
610	VFA0425	USB CABLE	1	
611	VSK0652	AC ADAPTOR	1	⚠
612	VPN6152	CUSHION	1	
613	VPG0X78	PACKING	1	NV-GS200GD-S
613	VPG0X98	PACKING	1	NV-GS120GD-S
614	VFA0428	SD CARD U.	1	
615	VQT0J00	OPERATING INSTRUCTIONS	1	⚠
616	VFF0231-S	CD-ROM	1	See Notes.

16.6. ELECTRICAL REPLACEMENT PARTS LIST

Note: 1. Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE: Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Unless otherwise specified,
All resistors are in OHMS, K=1,000 OHMS. All capacitors are in MICROFARADS (uf), P=uuF.
4. The P.C. Board units marked width "■" show below the main assembled parts.
5. The marking (RTL) indicaters the retention time is limited for this item.
After the discontinuation of this assembly in production, it will no longer be available.
6. Definition of Parts supplier:
Parts without mark in the Remarks column are supplied from SPC.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP03G57C	MAIN C.B.A.	1	(RTL) NV-GS200GD-S
■	VEP03G57H	MAIN C.B.A.	1	(RTL) NV-GS120GD-S
■	VEP23599A	SUB C.B.A.	1	(RTL) NV-GS200GD-S
■	VEP23602C	SUB C.B.A.	1	(RTL) NV-GS120GD-S
■	VEP001D4B	SIDE-L C.B.A.	1	(RTL)
■	VEP001C6A	JACK C.B.A.	1	(RTL)
■	VEP001D0A	SD HOLDER C.B.A.	1	(RTL)
■	VEP001C9A	R-RELAY C.B.A.	1	(RTL)
■	VEP001C8A	LCD DET C.B.A.	1	(RTL)
■	VEP001C2B	SD OPEN C.B.A.	1	(RTL)
■	VEP001G3A	PL C.B.A.	1	(RTL)
■	VEP08334B	MONITOR C.B.A.	1	(RTL) NV-GS200GD-S
■	VEP08336A	MONITOR C.B.A.	1	(RTL) NV-GS120GD-S
■	VEP29159A	EVF B/L C.B.A.	1	(RTL)
■	VEP04854A	FRONT C.B.A.	1	NV-GS200GD-S
■	VEP04854B	FRONT C.B.A.	1	NV-GS120GD-S
■	VEP001E6A	FLASH SW C.B.A.	1	NV-GS200GD-S
■	VEP03G57C	MAIN C.B.A.		(RTL) NV-GS200GD-S
■	VEP03G57H	MAIN C.B.A.		(RTL) NV-GS120GD-S
C602	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C603	ECST0GY476Z	T.CAPACITOR CH 4V 47U	1	F3F0G476A009
C610	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C613	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C614	F1H0J2250003	C.CAPACITOR CH 6.3V 2.2U	1	
C618	F1H0J2250003	C.CAPACITOR CH 6.3V 2.2U	1	
C619	F1H0J2250003	C.CAPACITOR CH 6.3V 2.2U	1	
C620	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1001	F1J1A475A023	C.CAPACITOR CH 10V 4.7U	1	
C1002	F1J1A475A023	C.CAPACITOR CH 10V 4.7U	1	
C1011	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
C1012	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C1013	ECJ0EB1E222K	C.CAPACITOR CH 25V 2200P	1	
C1021	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
C1022	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C1023	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C1024	ECJ0EB1C223K	C.CAPACITOR CH 16V 0.022U	1	
C1031	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
C1032	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C1033	ECJ0EB1E222K	C.CAPACITOR CH 25V 2200P	1	NV-GS200GD-S
C1033	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	NV-GS120GD-S
C1041	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
C1042	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C1043	ECJ0EB1E222K	C.CAPACITOR CH 25V 2200P	1	
C1044	ECJ0EB1C223K	C.CAPACITOR CH 16V 0.022U	1	
C1051	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
C1052	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1053	ECJ0EB1E222K	C.CAPACITOR CH 25V 2200P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C1054	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C1056	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1061	F1J1A335A005	C.CAPACITOR CH 10V 3.3U	1	
C1062	F1J1A335A005	C.CAPACITOR CH 10V 3.3U	1	
C1071	F1J1E105A080	C.CAPACITOR CH 25V 1U	1	
C1081	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1091	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	NV-GS120GD-S
C1101	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1102	ECJ0EC1H101J	C.CAPACITOR CH 50V 100P	1	
C1103	ECUE1C333KBQ	C.CAPACITOR CH 16V 0.033U	1	F1G1C333A004
C1104	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1105	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C1106	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C1111	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C1113	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1121	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C1122	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C1131	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C1141	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C1143	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1151	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C1153	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C1154	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C1211	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
C1214	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
C1218	ECST0JY106R	T.CAPACITOR CH 6.3V 10U	1	
C1221	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C1223	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C1224	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C1226	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C1228	ECST0JY106R	T.CAPACITOR CH 6.3V 10U	1	
C1241	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C1249	ECST0GY476Z	T.CAPACITOR CH 4V 47U	1	F3F0G476A009
C1251	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1271	F1J1E105A080	C.CAPACITOR CH 25V 1U	1	
C1281	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1282	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	NV-GS120GD-S
C1291	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	NV-GS120GD-S
C1322	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C1323	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C1326	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C1328	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C1380	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C1401	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C1411	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C1421	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C2004	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2005	ECST0JY226R	T.CAPACITOR CH 6.3V 22U	1	
C2006	ECST0JY106R	T.CAPACITOR CH 6.3V 10U	1	
C2007	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2008	ECST0JY106R	T.CAPACITOR CH 6.3V 10U	1	
C2009	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2010	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2012	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2014	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2015	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2016	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C2017	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2018	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2020	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2022	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2023	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2024	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2025	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2026	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2047	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2062	ECJ0EC1H050C	C.CAPACITOR CH 50V 5P	1	
C2063	ECJ0EC1H050C	C.CAPACITOR CH 50V 5P	1	
C2064	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2070	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2075	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2076	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2084	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2090	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C2201	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C2202	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C2203	ECST0JY106R	T.CAPACITOR CH 6.3V 10U	1	
C2204	ECJ0EC1H470J	C.CAPACITOR CH 50V 47P	1	F1G1H470A469
C2205	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2206	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2207	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2208	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2209	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2212	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C2213	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2216	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C2217	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2218	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2219	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2220	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2221	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C2222	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C2223	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C2225	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C2226	ECST0JY226R	T.CAPACITOR CH 6.3V 22U	1	
C2230	ECJ0EC1H101J	C.CAPACITOR CH 50V 100P	1	
C2231	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C2232	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3001	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3003	ECJ0EC1H050C	C.CAPACITOR CH 50V 5P	1	
C3004	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C3005	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C3006	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3014	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3015	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3016	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3017	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3018	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3019	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3026	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3027	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3028	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3030	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C3032	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3039	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3040	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3043	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3044	ECJ0EC1H221J	C.CAPACITOR CH 50V 220P	1	
C3045	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C3046	ECST0JY226R	T.CAPACITOR CH 6.3V 22U	1	
C3052	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C3057	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3058	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3059	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3060	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3061	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3062	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3063	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3064	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3066	ECJ0EC1H150J	C.CAPACITOR CH 50V 15P	1	
C3067	ECJ0EC1H150J	C.CAPACITOR CH 50V 15P	1	
C3068	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3074	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C3078	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C3080	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3099	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3201	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3202	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C3203	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C3204	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3205	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3206	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3207	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3208	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3209	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3210	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C3212	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3213	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3215	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3218	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3219	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3220	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3221	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C3229	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3301	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C3302	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3303	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3304	ECST0JY226R	T.CAPACITOR CH 6.3V 22U	1	
C3305	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C3306	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3307	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C3308	F1G0J224A004	C.CAPACITOR CH 6.3V 0.22U	1	
C3310	ECST0JY226R	T.CAPACITOR CH 6.3V 22U	1	
C3311	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3312	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C3313	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C3314	ECST0JY226R	T.CAPACITOR CH 6.3V 22U	1	
C3315	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3316	F1H0J2250003	C.CAPACITOR CH 6.3V 2.2U	1	
C3317	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3318	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3319	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3321	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3322	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3323	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3324	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3327	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3330	F3H0J1070005	E.CAPACITOR CH 6.3V 100U	1	
C3331	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3332	F3H0J1070005	E.CAPACITOR CH 6.3V 100U	1	
C3333	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3341	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3342	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3343	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3344	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3501	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3502	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3503	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3504	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3505	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3506	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3507	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3508	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3509	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3510	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3511	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3512	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3513	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3514	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C3515	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C3516	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3518	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3519	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3520	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3521	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3522	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3523	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3551	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3552	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	1	
C3553	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	1	
C3554	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3556	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C3558	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3559	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3560	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3561	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3562	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	1	
C3563	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C3566	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3569	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3570	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C5001	F3F0J4760002	E.CAPACITOR CH 6.3V 47U	1	
C5002	ECST0JY106R	T.CAPACITOR CH 6.3V 10U	1	
C5003	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C5005	ECUX1E681KBQ	C.CAPACITOR CH 25V 680P	1	ECJ0EB1E681K
C5008	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C5012	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C5013	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C5014	ECJ0EC1H470J	C.CAPACITOR CH 50V 47P	1	F1G1H470A469
C5021	ECJ0EC1H080C	C.CAPACITOR CH 50V 8P	1	
C5022	ECJ0EC1H080C	C.CAPACITOR CH 50V 8P	1	
C5023	ECJ0EC1H080C	C.CAPACITOR CH 50V 8P	1	
C5024	ECJ0EC1H080C	C.CAPACITOR CH 50V 8P	1	
C6501	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C6502	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C6503	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
D1011	B0JCMD000022	DIODE	1	
D1021	B0JCMD000022	DIODE	1	
D1031	B0JCMD000022	DIODE	1	
D1041	B0JCMD000022	DIODE	1	
D1051	MA2J11100L	DIODE	1	
D1071	MA2J11100L	DIODE	1	
D1081	MA2J11100L	DIODE	1	
D1091	MA2J11100L	DIODE	1	NV-GS120GD-S
D1101	MA8110MTX	DIODE	1	MAZ81100ML
D1102	B0ACCJ000025	DIODE	1	
D1151	MA8150LTX	DIODE	1	NV-GS120GD-S MAZ81500LL
D1152	MA2J11100L	DIODE	1	NV-GS120GD-S
D1421	MA2J11100L	DIODE	1	
D2001	MA2J11100L	DIODE	1	
D2002	MA2SD2400L	DIODE	1	
D2003	MA3S13300L	DIODE	1	
D2004	MA2SD2400L	DIODE	1	
D2008	MA2SD2400L	DIODE	1	
D2201	MA3S13300L	DIODE	1	
D3301	MA2SD2400L	DIODE	1	
FP601	K1MN26A00060	CONNECTOR 26P	1	
FP603	K1MN18A00055	CONNECTOR 18P	1	
FP1001	VJS4273B014	CONNECTOR (FEMALE) 14P	1	
FP2001	K1MN16B00137	CONNECTOR 16P	1	
FP2201	VJS3930B018	CONNECTOR (FEMALE) 18P	1	
FP2202	K1MN10B00080	CONNECTOR 10P	1	
FP2203	K1MN18B00089	CONNECTOR 18P	1	
FP2204	VJS4274B008	CONNECTOR (FEMALE) 8P	1	
FP3401	K1MN14A00079	CONNECTOR 14P	1	
FP5001	VJS3931B008	CONNECTOR (FEMALE) 8P	1	
FP6501	VJS3971D021	CONNECTOR (FEMALE) 21P	1	K1MN21B00016
FP6502	VJS3931D014	CONNECTOR (FEMALE) 14P	1	K1MN14B00069
FP6503	K1MN10A00067	CONNECTOR 10P	1	
FP6504	VJS3971B033	CONNECTOR (FEMALE) 33P	1	
FP6505	VJS3971D021	CONNECTOR (FEMALE) 21P	1	K1MN21B00016
IC601	C1AB00001842	IC	1	
IC602	C0DBZGA00011	IC	1	
IC1001	C0DBAZZ00073	IC	1	
IC1321	C0CBCAC00161	IC	1	
IC1322	C0CBCAC00117	IC	1	
IC2006	C3EBGG000016	IC	1	
IC2008	C3FBJC000050	IC	1	
IC2009	C1AB00001970	IC	1	
IC2012	C0CBABC00137	IC	1	
IC2014	C0CBCAC00129	IC	1	
IC2015	C0CBAAA00016	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC2017	C0EBD0000281	IC	1	
IC2018	C0JBAZ002139	IC	1	
IC2019	C0JBAZ002139	IC	1	
IC2201	C1AB00001752	IC	1	
IC2202	NJM2143R	IC	1	C0ABAA000045
IC3001	C1AB00001962	IC	1	
IC3201	C1AB00001695	IC	1	
IC3301	C1AB00001894	IC	1	
IC3501	C1AB00001904	IC	1	
IC3502	NJM2143R	IC	1	C0ABAA000045
IC3503	BA7653AFV	IC	1	C9ZB00000281
IC5001	AN3732FJMEFV	IC	1	
IP1001	K5H4021A0004	FUSE	1	⚠
L1011	G1C680MA0024	CHIP INDUCTOR 68UH	1	
L1021	G1C100MA0084	CHIP INDUCTOR 10UH	1	NV-GS200GD-S
L1021	G1C150MA0084	CHIP INDUCTOR 15UH	1	NV-GS120GD-S
L1031	G1C330MA0024	CHIP INDUCTOR 33UH	1	NV-GS200GD-S
L1031	G1C560MA0024	CHIP INDUCTOR 56UH	1	NV-GS120GD-S
L1041	G1C150MA0084	CHIP INDUCTOR 15UH	1	
L1061	G1C330MA0085	CHIP INDUCTOR 33UH	1	
L1062	G1C181MA0024	CHIP INDUCTOR 180UH	1	
L1211	G1C4R7MA0073	COIL 4.7UH	1	
L1214	G1C4R7MA0073	COIL 4.7UH	1	
L1221	G1C4R7MA0073	COIL 4.7UH	1	
L1223	G1C4R7MA0076	COIL 4.7UH	1	
L1224	G1C4R7MA0076	COIL 4.7UH	1	
L1226	G1C4R7MA0073	COIL 4.7UH	1	
L1241	G1C4R7MA0073	COIL 4.7UH	1	
L1251	G1C4R7MA0076	COIL 4.7UH	1	
L1271	G1C4R7MA0076	COIL 4.7UH	1	
L1281	G1C4R7MA0076	COIL 4.7UH	1	
L1282	G1C4R7MA0076	COIL 4.7UH	1	NV-GS120GD-S
L1291	G1C4R7MA0076	COIL 4.7UH	1	NV-GS120GD-S
L1321	G1C4R7MA0076	COIL 4.7UH	1	
L1322	G1C4R7MA0076	COIL 4.7UH	1	
L3019	G1C100MA0060	CHIP INDUCTOR 10UH	1	
L3025	G1C100KA0055	CHIP INDUCTOR 10UH	1	
L3027	G1C100KA0055	CHIP INDUCTOR 10UH	1	
L3204	G1C101KA0055	CHIP INDUCTOR 100UH	1	
L3301	G1C100KA0055	CHIP INDUCTOR 10UH	1	
L3302	G1C330MA0110	CHIP INDUCTOR 33UH	1	
L3303	G1C100KA0055	CHIP INDUCTOR 10UH	1	
L3304	G1C100KA0055	CHIP INDUCTOR 10UH	1	
L3305	G1C100KA0055	CHIP INDUCTOR 10UH	1	
L3501	G1C100KA0055	CHIP INDUCTOR 10UH	1	
L3505	G1C330K00017	CHIP INDUCTOR 33UH	1	
L3506	G1C330K00017	CHIP INDUCTOR 33UH	1	
L3507	G1C330K00017	CHIP INDUCTOR 33UH	1	
L3508	G1C330K00017	CHIP INDUCTOR 33UH	1	
L3509	G1C330K00017	CHIP INDUCTOR 33UH	1	
L5001	G1C101KA0055	CHIP INDUCTOR 100UH	1	
L5002	G1C220KA0055	CHIP INDUCTOR 22UH	1	
LB1001	VLP0332A420	CHIP BEAD	1	J0JHC0000017

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
LB3001	J0JAC0000014	FILTER	1	J0JAC0000016
LB3002	J0JAC0000014	FILTER	1	J0JAC0000016
LB3003	J0JBC0000115	INDUCTOR	1	
LB3004	J0JAC0000014	FILTER	1	J0JAC0000016
LB3007	J0JHC0000032	FILTER	1	
LB3011	J0JAC0000014	FILTER	1	J0JAC0000016
LB3012	J0JAC0000014	FILTER	1	J0JAC0000016
LB3013	J0JAC0000014	FILTER	1	J0JAC0000016
LB3201	J0JAC0000014	FILTER	1	J0JAC0000016
LB3203	J0JAC0000014	FILTER	1	J0JAC0000016
LB3301	VLF1144A102	COIL 1000UH	1	
LB3501	J0JBC0000054	INDUCTOR	1	J0JBC0000059
LB3502	J0JBC0000054	INDUCTOR	1	J0JBC0000059
PP3001	K1KA20B00141	CONNECTOR 20P	1	
PS3001	K1KBF0A00003	CONNECTOR	1	NV-GS200GD-S
PS3001	K1KBA0A00097	CONNECTOR	1	NV-GS120GD-S
Q601	B1ABBE000002	TRANSISTOR	1	
Q602	B1ABBE000002	TRANSISTOR	1	
Q603	B1ABBE000002	TRANSISTOR	1	
Q1011	B1DHCC000034	TRANSISTOR	1	
Q1021	B1DHCC000034	TRANSISTOR	1	
Q1031	B1DHCC000034	TRANSISTOR	1	
Q1041	B1DHCC000034	TRANSISTOR	1	
Q1042	B1DFCD000012	TRANSISTOR	1	
Q1051	B1DFCG000011	TRANSISTOR	1	
Q1061	B1ZBZ0000040	TRANSISTOR	1	
Q1062	B1ZBZ0000040	TRANSISTOR	1	
Q1101	B1ABBE000002	TRANSISTOR	1	
Q1381	B1ADBE000001	TRANSISTOR	1	
Q1382	XP1501	TRANSISTOR-TRANSISTOR	1	XP01501
Q1383	B1ADBE000001	TRANSISTOR	1	NV-GS200GD-S
Q1384	XP1501	TRANSISTOR-TRANSISTOR	1	NV-GS200GD-S XP01501
Q1391	B1ABBE000002	TRANSISTOR	1	NV-GS120GD-S
Q1392	XP1401	TRANSISTOR-TRANSISTOR	1	NV-GS120GD-S XP01401
Q1412	2SB970-R	TRANSISTOR	1	2SB09700R
Q1413	B1ABBE000002	TRANSISTOR	1	
Q1421	2SB970-R	TRANSISTOR	1	2SB09700R
Q1422	B1ABBE000002	TRANSISTOR	1	
Q1482	B1ABBE000002	TRANSISTOR	1	
Q2001	2SB970-R	TRANSISTOR	1	2SB09700R
Q2002	B1CHHD000003	TRANSISTOR	1	
Q2003	2SD1820	TRANSISTOR	1	
Q2004	B1CHHD000003	TRANSISTOR	1	
Q2005	2SB970-R	TRANSISTOR	1	2SB09700R
Q3301	B1ABBE000002	TRANSISTOR	1	
Q3302	B1ABBE000002	TRANSISTOR	1	
Q3303	B1ABBE000002	TRANSISTOR	1	
Q3503	XP0460100L	TRANSISTOR	1	
Q3504	2SB1218A-R	TRANSISTOR	1	2SB1218AR
Q3505	B1ABBE000002	TRANSISTOR	1	
Q3506	XP0460100L	TRANSISTOR	1	
QR1001	B1GDBEHH0001	TRANSISTOR-RESISTOR	1	
QR1002	B1GBBEKM0001	TRANSISTOR-RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
QR1101	B1GBBEHH0001	TRANSISTOR-RESISTOR	1	
QR1102	B1GDBEHH0002	TRANSISTOR-RESISTOR	1	
QR1103	UN9114	TRANSISTOR-RESISTOR	1	UNR9114
QR1104	UN9214JTX	TRANSISTOR-RESISTOR	1	
QR1111	UN9214JTX	TRANSISTOR-RESISTOR	1	
QR1141	UN9214JTX	TRANSISTOR-RESISTOR	1	
QR1401	UNR911NJ0L	TRANSISTOR-RESISTOR	1	
QR1411	XP0431N00L	TRANSISTOR	1	
QR1413	B1GDBEHM0001	TRANSISTOR-RESISTOR	1	
QR1491	B1GDBEHH0001	TRANSISTOR-RESISTOR	1	NV-GS120GD-S
QR2001	B1GBBEMM0001	TRANSISTOR-RESISTOR	1	NV-GS200GD-S
QR2002	UNR9115J0L	TRANSISTOR	1	
QR2003	B1GBBEMK0001	TRANSISTOR-RESISTOR	1	
QR2004	B1GBBEMM0001	TRANSISTOR-RESISTOR	1	
QR2005	UNR9115J0L	TRANSISTOR	1	
QR2006	XP4115	TRANSISTOR-RESISTOR	1	XP04115
QR2007	B1GDBEFA0001	TRANSISTOR-RESISTOR	1	
QR2008	UN921F	TRANSISTOR	1	
QR2009	B1GDBEHH0001	TRANSISTOR-RESISTOR	1	
QR2010	UN921F	TRANSISTOR	1	
QR3001	B1GDBEHH0002	TRANSISTOR-RESISTOR	1	
QR3501	B1GDBEFH0001	TRANSISTOR-RESISTOR	1	
QR3502	B1GBBEKK0001	TRANSISTOR-RESISTOR	1	
R602	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	1	D0GBR00JA017
R603	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	1	D0GBR00JA017
R604	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R605	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R606	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R607	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R608	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R609	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R611	ERJ2GEJ121	M.RESISTOR CH 1/16W 120	1	
R612	ERJ2GEJ390X	M.RESISTOR CH 1/16W 39	1	ERJ2RMJ390X
R614	ERJ2RHD471	M.RESISTOR CH 1/16W 470	1	
R615	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R616	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R617	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R640	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R641	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R642	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R1011	ERJ6RBB822	M.RESISTOR CH 1/10W 8.2K	1	
R1014	ERJ2RHD201	M.RESISTOR CH 1/16W 200	1	
R1015	ERJ6RBB272	M.RESISTOR CH 1/10W 2.7K	1	
R1021	ERJ2RHD392	M.RESISTOR CH 1/16W 3.9K	1	
R1024	ERJ2RHD241	M.RESISTOR CH 1/16W 240	1	
R1025	ERJ2RHD272X	M.RESISTOR CH 1/16W 2.7K	1	
R1026	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R1031	ERJ2RHD472	M.RESISTOR CH 1/16W 4.7K	1	
R1034	ERJ2RHD111	M.RESISTOR CH 1/16W 110	1	
R1035	ERJ2RHD272X	M.RESISTOR CH 1/16W 2.7K	1	
R1041	ERJ2RHD132	M.RESISTOR CH 1/16W 1.3K	1	
R1044	ERJ2RKD820	M.RESISTOR CH 1/16W 82	1	NV-GS200GD-S
R1044	ERJ2RHD301	M.RESISTOR CH 1/16W 300	1	NV-GS120GD-S
R1045	ERJ2RHD222	M.RESISTOR CH 1/16W 2.2K	1	
R1046	ERJ2GEJ331X	M.RESISTOR CH 1/16W 330	1	ERJ2RMJ331X
R1051	ERJ6RBB333	M.RESISTOR CH 1/10W 33K	1	NV-GS200GD-S

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R1051	ERJ6RBB273	M.RESISTOR CH 1/10W 27K	1	NV-GS120GD-S
R1054	ERJ2RHD101	M.RESISTOR CH 1/16W 100	1	NV-GS200GD-S
R1054	ERJ2RHD201	M.RESISTOR CH 1/16W 200	1	NV-GS120GD-S
R1055	ERJ6RBB272	M.RESISTOR CH 1/10W 2.7K	1	
R1056	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R1101	ERJ2RHD133	M.RESISTOR CH 1/16W 13K	1	NV-GS200GD-S
R1101	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	NV-GS120GD-S
R1102	ERJ2RHD113	M.RESISTOR CH 1/16W 11K	1	NV-GS200GD-S
R1102	ERJ2RHD133	M.RESISTOR CH 1/16W 13K	1	NV-GS120GD-S
R1103	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R1104	ERJ2GEJ393X	M.RESISTOR CH 1/16W 39K	1	ERJ2RMJ393X
R1105	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R1106	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R1111	ERJ2GEJ271	M.RESISTOR CH 1/16W 270	1	
R1112	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R1121	ERJ2GEJ271	M.RESISTOR CH 1/16W 270	1	
R1131	ERJ2GEJ271	M.RESISTOR CH 1/16W 270	1	
R1141	ERJ2GEJ271	M.RESISTOR CH 1/16W 270	1	
R1142	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R1151	ERJ2GEJ271	M.RESISTOR CH 1/16W 270	1	
R1152	ERJ2RHD223X	M.RESISTOR CH 1/16W 22K	1	
R1153	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R1155	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	NV-GS120GD-S
R1221	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	NV-GS200GD-S
R1232	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R1241	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R1280	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS120GD-S
R1281	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R1311	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R1380	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	NV-GS200GD-S
R1381	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	1	
R1382	ERJ2RHD272X	M.RESISTOR CH 1/16W 2.7K	1	
R1383	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R1384	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R1385	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1386	ERJ2RHD563	M.RESISTOR CH 1/16W 56K	1	NV-GS200GD-S
R1387	ERJ2RHD752	M.RESISTOR CH 1/16W 7.5K	1	NV-GS200GD-S
R1388	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	NV-GS200GD-S
R1389	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	NV-GS200GD-S
R1390	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R1391	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	NV-GS120GD-S
R1392	ERJ2RHD221	M.RESISTOR CH 1/16W 220	1	NV-GS120GD-S
R1393	ERJ2RHD223X	M.RESISTOR CH 1/16W 22K	1	NV-GS120GD-S
R1394	ERJ2GEJ123	M.RESISTOR CH 1/16W 12K	1	NV-GS120GD-S
R1401	ERJ2RHD103X	M.RESISTOR CH 1/16W 10K	1	
R1402	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R1413	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1414	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R1415	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R1416	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1421	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1422	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R1423	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R1424	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1483	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	
R1484	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R2001	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R2002	ERJ2GEJ471X	M.RESISTOR CH 1/16W 470	1	ERJ2RMJ471X
R2003	ERJ2GEJ471X	M.RESISTOR CH 1/16W 470	1	ERJ2RMJ471X
R2004	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R2006	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R2007	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R2008	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R2009	ERJ2RHD683	M.RESISTOR CH 1/16W 68K	1	
R2010	ERJ2RHD223X	M.RESISTOR CH 1/16W 22K	1	
R2012	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2013	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R2015	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R2017	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2018	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R2019	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2020	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2022	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R2023	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2024	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2025	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2026	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R2027	ERJ2GEJ393X	M.RESISTOR CH 1/16W 39K	1	ERJ2RMJ393X
R2028	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R2029	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R2030	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R2032	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R2033	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R2034	ERJ2GEJ683X	M.RESISTOR CH 1/16W 68K	1	ERJ2RMJ683X
R2035	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2036	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2038	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2039	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2040	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R2041	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	
R2042	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2043	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2044	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2045	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R2046	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R2047	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R2048	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2049	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2051	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2052	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2053	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2054	ERJ2GEJ123	M.RESISTOR CH 1/16W 12K	1	
R2055	ERJ2GEJ123	M.RESISTOR CH 1/16W 12K	1	
R2056	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R2058	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2059	ERJ2GEJ394X	M.RESISTOR CH 1/16W 390K	1	ERJ2RMJ394X
R2060	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2061	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	
R2072	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2073	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R2074	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R2079	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R2080	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R2081	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R2082	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2083	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2084	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2085	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2087	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2088	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2089	ERJ2GEJ822X	M.RESISTOR CH 1/16W 8.2K	1	ERJ2RMJ822X
R2090	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R2091	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2092	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R2093	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R2094	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R2096	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R2097	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R2107	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R2109	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R2110	ERJ2GEJ822X	M.RESISTOR CH 1/16W 8.2K	1	ERJ2RMJ822X
R2111	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R2112	ERJ2GEJ822X	M.RESISTOR CH 1/16W 8.2K	1	ERJ2RMJ822X
R2124	ERJ6GEYJ330V	M.RESISTOR CH 1/10W 33	1	
R2128	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R2129	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2133	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R2140	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R2141	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R2146	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R2155	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R2158	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2177	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2201	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R2202	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2203	ERJ2GEJ823X	M.RESISTOR CH 1/16W 82K	1	ERJ2RMJ823X
R2204	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2205	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2206	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2207	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R2210	ERJ2RHD242	M.RESISTOR CH 1/16W 2.4K	1	
R2211	D1BDR270A053	RESISTOR	1	
R2212	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R2213	D1BDR270A053	RESISTOR	1	
R2214	ERJ2RHD273X	M.RESISTOR CH 1/16W 27K	1	
R2217	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R2218	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R2219	ERJ2RHD273X	M.RESISTOR CH 1/16W 27K	1	
R2220	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2222	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2224	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2225	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2226	D1BDR680A053	RESISTOR	1	
R2255	ERJ2GEJ393X	M.RESISTOR CH 1/16W 39K	1	ERJ2RMJ393X
R2256	ERJ2GEJ563X	M.RESISTOR CH 1/16W 56K	1	
R3002	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3003	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R3004	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R3005	ERJ2GEJ220X	M.RESISTOR CH 1/16W 22	1	ERJ2RMJ220X
R3006	ERJ2GEJ220X	M.RESISTOR CH 1/16W 22	1	ERJ2RMJ220X
R3007	ERJ2GEJ680X	M.RESISTOR CH 1/16W 68	1	ERJ2RMJ680X

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3008	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3009	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R3011	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3012	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3013	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R3014	ERJ2GEJ331X	M.RESISTOR CH 1/16W 330	1	ERJ2RMJ331X
R3015	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R3016	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3017	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3020	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3021	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R3022	ERJ2RKD560X	M.RESISTOR CH 1/16W 56	1	
R3023	ERJ2RKD560X	M.RESISTOR CH 1/16W 56	1	
R3024	ERJ2RKD560X	M.RESISTOR CH 1/16W 56	1	
R3025	ERJ2RKD560X	M.RESISTOR CH 1/16W 56	1	
R3026	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R3030	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3033	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R3034	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R3035	ERJ2GEJ123	M.RESISTOR CH 1/16W 12K	1	
R3036	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R3037	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R3038	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R3040	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3045	ERJ2GEJ181	M.RESISTOR CH 1/16W 180	1	
R3046	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R3048	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R3051	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R3063	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R3071	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R3072	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R3077	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R3201	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R3202	ERJ2GEJ271	M.RESISTOR CH 1/16W 270	1	
R3203	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R3204	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R3205	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R3206	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R3207	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R3211	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3212	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3214	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R3215	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R3218	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3219	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R3221	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3222	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3223	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3260	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R3301	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R3302	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R3308	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R3309	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	ERJ2RMJ333X
R3310	ERJ2RHD752	M.RESISTOR CH 1/16W 7.5K	1	
R3311	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	ERJ2RMJ333X
R3312	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R3313	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3314	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R3315	ERJ2GEJ561X	M.RESISTOR CH 1/16W 560	1	ERJ2RMJ561X
R3316	ERJ2GEJ561X	M.RESISTOR CH 1/16W 560	1	ERJ2RMJ561X
R3317	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R3318	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3320	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R3321	ERJ2GEJ680X	M.RESISTOR CH 1/16W 68	1	ERJ2RMJ680X
R3322	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3323	ERJ2GEJ680X	M.RESISTOR CH 1/16W 68	1	ERJ2RMJ680X
R3324	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3325	ERJ2GEJ680X	M.RESISTOR CH 1/16W 68	1	ERJ2RMJ680X
R3326	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3330	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3501	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3503	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R3504	ERJ2RHD122	M.RESISTOR CH 1/16W 1.2K	1	
R3505	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R3506	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R3507	ERJ2RHD392	M.RESISTOR CH 1/16W 3.9K	1	
R3508	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R3514	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R3515	ERJ2GEJ331X	M.RESISTOR CH 1/16W 330	1	ERJ2RMJ331X
R3516	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R3549	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R3550	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R3553	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R3554	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R3555	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R3556	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R3557	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	ERJ2RMJ333X
R3558	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	ERJ2RMJ333X
R3560	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R3561	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R3562	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R3563	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R3564	ERJ2GEJ124	M.RESISTOR CH 1/16W 120K	1	
R3565	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R3568	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	
R3580	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3582	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R5001	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R5004	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R5006	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R5015	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R6501	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS120GD-S
R6503	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R6901	ERJ6GEYJ330V	M.RESISTOR CH 1/10W 33	1	
R6905	ERJ2GEJ330X	M.RESISTOR CH 1/16W 33	1	
R6908	ERJ2GEJ330X	M.RESISTOR CH 1/16W 33	1	
R6909	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	NV-GS200GD-S
R6909	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	NV-GS120GD-S
R6911	ERJ2GEJ122	M.RESISTOR CH 1/16W 1.2K	1	
RX2002	D1H84734A024	RESISTOR	1	
RX2004	D1H83314A024	RESISTOR	1	
RX2005	D1H84734A024	RESISTOR	1	
RX2006	D1H84734A024	RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
RX2008	D1H83324A013	RESISTOR	1	
RX2009	D1H81024A024	RESISTOR	1	
RX2010	D1H81044A024	RESISTOR	1	
RX2201	D1H81024A024	RESISTOR	1	
RX2202	D1H81034A024	RESISTOR	1	
RX3002	D1H84734A024	RESISTOR	1	
RX3003	D1H84734A024	RESISTOR	1	
RX3004	D1H84734A024	RESISTOR	1	
RX3005	D1H84704A024	RESISTOR	1	
RX3201	D1H84734A024	RESISTOR	1	
RX3202	D1H81034A024	RESISTOR	1	
RX5001	D1H81034A024	RESISTOR	1	
T1051	G5DYA0000077	SWITCHING TRANSFORMER	1	NV-GS200GD-S
T1051	G5DYA0000075	SWITCHING TRANSFORMER	1	NV-GS120GD-S
VZ6501	VRT0158	TRANSIENT/SURGE ABSORBER	1	D4ED12710002
VZ6502	VRT0158	TRANSIENT/SURGE ABSORBER	1	D4ED12710002
VZ6503	VRT0158	TRANSIENT/SURGE ABSORBER	1	D4ED12710002
X2002	H0J135500008	CRYSTAL OSCILLATOR	1	
X3001	H0J245500021	CRYSTAL OSCILLATOR	1	
X3002	H0J480000002	CRYSTAL OSCILLATOR 48MHZ	1	
■	VEP23599A	SUB C.B.A.		(RTL) NV-GS200GD-S
■	VEP23602C	SUB C.B.A.		(RTL) NV-GS120GD-S
C101	F3F0G107A003	E.CAPACITOR CH 4V 100U	1	NV-GS200GD-S
C102	F1J1E105A080	C.CAPACITOR CH 25V 1U	1	
C103	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C104	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C105	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C106	ECST0GY226R	T.CAPACITOR CH 4V 22U	1	
C107	F1J1E105A080	C.CAPACITOR CH 25V 1U	1	
C108	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	NV-GS200GD-S
C109	ECST0JY106R	T.CAPACITOR CH 6.3V 10U	1	
C111	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C112	ECST0GY226R	T.CAPACITOR CH 4V 22U	1	NV-GS120GD-S
C113	ECST0GY226R	T.CAPACITOR CH 4V 22U	1	
C114	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C115	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C116	ECJ0EC1H221J	C.CAPACITOR CH 50V 220P	1	NV-GS120GD-S
C117	ECJ0EC1H221J	C.CAPACITOR CH 50V 220P	1	NV-GS120GD-S
C118	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C119	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C120	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C121	ECUE1E821KBQ	C.CAPACITOR CH 25V 820P	1	NV-GS200GD-S F1G1E821A056
C121	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	NV-GS120GD-S
C122	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C123	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C124	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C125	ECUE1E821KBQ	C.CAPACITOR CH 25V 820P	1	NV-GS200GD-S F1G1E821A056
C125	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	NV-GS120GD-S
C126	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C127	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C128	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C129	ECST1DX106Z	T.CAPACITOR CH 20V 10U	1	
C131	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C132	ECUE1E821KBQ	C.CAPACITOR CH 25V 820P	1	NV-GS200GD-S F1G1E821A056
C132	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	NV-GS120GD-S
C133	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C134	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C136	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C137	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C138	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C139	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C140	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C142	F1J1C335A121	C.CAPACITOR CH 16V 3.3U	1	
C143	F1J1C335A121	C.CAPACITOR CH 16V 3.3U	1	
C144	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C146	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C147	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C148	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C149	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C150	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C151	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C152	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C154	F1J1E105A080	C.CAPACITOR CH 25V 1U	1	
C156	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C303	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C304	F3F0G107A003	E.CAPACITOR CH 4V 100U	1	
C306	ECJ0EC1H180J	C.CAPACITOR CH 50V 18P	1	
C307	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C308	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C309	ECST0JY106R	T.CAPACITOR CH 6.3V 10U	1	
C310	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C311	ECST0JY106R	T.CAPACITOR CH 6.3V 10U	1	
C312	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C313	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C314	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	NV-GS200GD-S
C315	ECJ0EB1C153K	C.CAPACITOR CH 16V 0.015U	1	
C317	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C320	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C321	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C322	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C327	ECST0JY106R	T.CAPACITOR CH 6.3V 10U	1	
C328	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C329	ECJ0EB1C153K	C.CAPACITOR CH 16V 0.015U	1	
C330	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C340	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C343	ECJ0EB1C153K	C.CAPACITOR CH 16V 0.015U	1	
C701	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C702	ECUX1E271KBQ	C.CAPACITOR CH 25V 270P	1	
C703	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C704	ECJ0EB1E222K	C.CAPACITOR CH 25V 2200P	1	
C705	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C706	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C707	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C708	ECUE1E272KBQ	C.CAPACITOR CH 25V 2700P	1	ECJ0EB1E272K
C709	ECJ0EB1E222K	C.CAPACITOR CH 25V 2200P	1	
C710	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C711	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C712	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C713	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	ECJ0EB1E471K
C714	ECST0JY106R	T.CAPACITOR CH 6.3V 10U	1	
C715	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C716	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C717	ECJ1XB1C104K	C.CAPACITOR CH 16V 0.1U	1	ECJ1ZB1C104K
C718	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C719	ECJ1VB1A224K	C.CAPACITOR CH 10V 0.22U	1	
C720	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C721	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C722	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C723	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C724	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C725	ECST1DY475Z	T.CAPACITOR CH 20V 4.7U	1	
C731	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C732	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C733	ECJ1VB1A224K	C.CAPACITOR CH 10V 0.22U	1	
C736	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C739	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C740	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C741	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C742	ECJ1XB1C104K	C.CAPACITOR CH 16V 0.1U	1	ECJ1ZB1C104K
C744	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C749	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	ECJ0EB1E471K
C1225	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	NV-GS200GD-S
C1227	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C1229	ECST0JY106R	T.CAPACITOR CH 6.3V 10U	1	NV-GS200GD-S
C1231	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C1242	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	NV-GS200GD-S
C1248	ECST0GY476Z	T.CAPACITOR CH 4V 47U	1	NV-GS200GD-S F3F0G476A009
C1381	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C1382	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C1451	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
C3401	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	NV-GS200GD-S
C3402	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	NV-GS200GD-S
C3403	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	NV-GS200GD-S
C3404	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	NV-GS200GD-S
C3405	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	NV-GS200GD-S
C3406	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	NV-GS200GD-S
C3407	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	NV-GS200GD-S F1J0J106A014
C3451	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	NV-GS200GD-S
C3452	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	NV-GS200GD-S
C3453	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	NV-GS200GD-S
D101	MA6S121	DIODE	1	MA6Z121
D102	B0JCDD000002	DIODE	1	
D303	B0JCDD000002	DIODE	1	
D304	B0JCDD000002	DIODE	1	
D305	B0JCDD000002	DIODE	1	
D1451	MA2J11100L	DIODE	1	
D1471	MA2J11100L	DIODE	1	
FP701	VJS3971B033	CONNECTOR (FEMALE) 33P	1	
FP3402	K1MN10A00074	CONNECTOR 10P	1	NV-GS200GD-S
FP4002	K1MN10B00080	CONNECTOR 10P	1	NV-GS200GD-S
IC101	MN52B0	IC	1	NV-GS200GD-S
IC101	MN52B1	IC	1	NV-GS120GD-S

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC102	C0CBCAD00021	IC	1	
IC103	C0CBCAD00020	IC	1	
IC104	C1AB00001791	IC	1	NV-GS200GD-S
IC104	C1AB00001725	IC	1	NV-GS120GD-S
IC105	C1AB00001791	IC	1	NV-GS200GD-S
IC105	C1AB00001725	IC	1	NV-GS120GD-S
IC106	C1AB00001791	IC	1	NV-GS200GD-S
IC106	C1AB00001725	IC	1	NV-GS120GD-S
IC107	C0JBAB000276	IC	1	NV-GS200GD-S
IC108	MN3114QFN-E1	IC	1	
IC110	C0JBAB000276	IC	1	
IC301	C0JBAF000476	IC	1	NV-GS200GD-S
IC302	C0CBCAB00010	IC	1	
IC303	MN5491R	IC	1	
IC304	C0JBAA000102	IC	1	
IC305	C2DBKJ000178	IC	1	NV-GS200GD-S
IC305	C2DBKJ000194	IC	1	NV-GS120GD-S
IC306	TC7SH14FU	IC	1	NV-GS200GD-S C0JBAZ001259
IC307	C3EBHC000015	IC	1	
IC701	C0ABCA000053	IC	1	
IC702	C1AB00001753	IC	1	
IC703	C0CBAEC00006	IC	1	
IC705	C0ABCA000053	IC	1	
IC706	NJM2125F	IC	1	C0ABAA000042
IC3451	C0ZBZ0000806	IC	1	NV-GS200GD-S
IC3452	MBM29LV8P4AC	IC	1	NV-GS200GD-S
IC3453	C3ABPJ000057	IC	1	NV-GS200GD-S
L101	VLQ0911K100	COIL 10UH	1	G1C100K00019
L104	VLQ0911K100	COIL 10UH	1	G1C100K00019
L105	VLQ0911K100	COIL 10UH	1	G1C100K00019
L309	VLQ0911K100	COIL 10UH	1	G1C100K00019
L701	VLQ0911K100	COIL 10UH	1	G1C100K00019
L702	G1C220KA0055	CHIP INDUCTOR 22UH	1	
L1225	G1C4R7MA0076	COIL 4.7UH	1	NV-GS200GD-S
L1227	G1C4R7MA0073	COIL 4.7UH	1	
L1231	G1C4R7MA0072	COIL 4.7UH	1	
L1242	G1C4R7MA0073	COIL 4.7UH	1	NV-GS200GD-S
LB104	VLP0140	CHIP BEAD	1	
LB301	J0JCC0000096	INDUCTOR	1	
LB302	J0JCC0000096	INDUCTOR	1	
LB303	VLP0332A420	CHIP BEAD	1	J0JHC0000017
LB451	J0JAC0000014	FILTER	1	NV-GS200GD-S J0JAC0000016
LB452	J0JAC0000014	FILTER	1	NV-GS200GD-S J0JAC0000016
LB453	J0JAC0000014	FILTER	1	NV-GS200GD-S J0JAC0000016
LB454	J0JAC0000014	FILTER	1	NV-GS200GD-S J0JAC0000016
LB455	J0JAC0000014	FILTER	1	NV-GS200GD-S J0JAC0000016
LB3401	VLP0140	CHIP BEAD	1	NV-GS200GD-S
LB3402	J0JHC0000032	FILTER	1	NV-GS200GD-S
LB3403	J0JHC0000032	FILTER	1	NV-GS200GD-S
PP301	K1KAF0A00003	CONNECTOR	1	NV-GS200GD-S
PP301	K1KAA0A00111	CONNECTOR	1	NV-GS120GD-S
PS201	VJS4009A040	CONNECTOR (FEMALE) 40P	1	K1KB40A00068

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q451	B1DDCB000002	TRANSISTOR	1	NV-GS200GD-S
Q703	2SD2216J0L	TRANSISTOR	1	
Q704	2SD0601A	CHIP TRANSISTOR	1	
Q1351	B1ADBE000001	TRANSISTOR	1	
Q1352	XP1501	TRANSISTOR-TRANSISTOR	1	XP01501
Q1371	B1ABBE000002	TRANSISTOR	1	
Q1372	XP1401	TRANSISTOR-TRANSISTOR	1	XP01401
Q1385	XP4501	TRANSISTOR-TRANSISTOR	1	XP04501
Q1451	B1ABBE000002	TRANSISTOR	1	
Q3401	2SB798A	TRANSISTOR	1	NV-GS200GD-S B1BDBD000002
Q3402	2SC4944YR	TRANSISTOR	1	NV-GS200GD-S B1HBCFD00001
QR101	UNR911NJ0L	TRANSISTOR-RESISTOR	1	NV-GS120GD-S
QR102	B1GBBEKM0001	TRANSISTOR-RESISTOR	1	NV-GS120GD-S
QR301	UNR9215J0L	TRANSISTOR-RESISTOR	1	NV-GS200GD-S
QR302	UNR9215J0L	TRANSISTOR-RESISTOR	1	
QR451	UN9214JTX	TRANSISTOR-RESISTOR	1	NV-GS200GD-S
QR1451	B1GDBEKM0001	TRANSISTOR-RESISTOR	1	
QR1471	B1GDBEKM0001	TRANSISTOR-RESISTOR	1	
QR3401	UN921F	TRANSISTOR	1	NV-GS200GD-S
R101	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS120GD-S
R102	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R103	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R104	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R105	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R106	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R107	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R112	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R112	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	NV-GS120GD-S
R113	ERJ2GEJ392X	M.RESISTOR CH 1/16W 3.9K	1	ERJ2RMJ392X
R114	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R114	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	NV-GS120GD-S
R117	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	NV-GS120GD-S
R118	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	NV-GS120GD-S
R119	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	NV-GS120GD-S
R124	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	ERJ2RMJ333X
R125	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	ERJ2RMJ333X
R126	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	ERJ2RMJ333X
R127	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R131	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R132	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R133	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS120GD-S
R134	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS120GD-S
R135	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS120GD-S
R136	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R137	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R138	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R139	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R141	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R142	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R145	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R146	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R147	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R148	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R301	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R302	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R303	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R304	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	NV-GS200GD-S
R305	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R306	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R307	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R308	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R309	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R310	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R311	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R312	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R313	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R314	ERJ2GEJ392X	M.RESISTOR CH 1/16W 3.9K	1	ERJ2RMJ392X
R315	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R316	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R317	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R318	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	NV-GS200GD-S
R319	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	NV-GS200GD-S
R319	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS120GD-S
R320	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R321	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	NV-GS200GD-S ERJ2RMJ333X
R322	ERJ2GEJ822X	M.RESISTOR CH 1/16W 8.2K	1	ERJ2RMJ822X
R323	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R326	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R327	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R328	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R329	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	NV-GS200GD-S
R330	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R331	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R332	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R333	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS120GD-S
R334	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R335	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	ERJ2RMJ333X
R336	ERJ2GEJ271	M.RESISTOR CH 1/16W 270	1	
R337	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R338	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R339	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R340	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R341	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R342	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R343	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R344	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R345	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R347	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R348	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R350	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R351	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS120GD-S
R352	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R353	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R354	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R355	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R356	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R360	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R361	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS120GD-S
R362	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R363	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS120GD-S
R364	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R365	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R366	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R367	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R368	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R369	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R370	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R371	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R372	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R374	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R377	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R378	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R379	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R380	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R381	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R382	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R383	ERJ2GEJ821X	M.RESISTOR CH 1/16W 820	1	ERJ2RMJ821X
R384	ERJ2GEJ682X	M.RESISTOR CH 1/16W 6.8K	1	ERJ2RMJ682X
R385	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R386	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R393	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R394	ERJ2GEJ332X	M.RESISTOR CH 1/16W 3.3K	1	ERJ2RMJ332X
R450	ERJ8GEY0R00V	M.RESISTOR CH 1/8W 0	1	NV-GS200GD-S
R451	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	NV-GS200GD-S
R452	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	NV-GS200GD-S
R453	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	NV-GS200GD-S
R454	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	NV-GS200GD-S
R455	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	NV-GS200GD-S
R456	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	NV-GS200GD-S
R457	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	NV-GS200GD-S
R701	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R702	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R703	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R704	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R705	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R706	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R708	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R711	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R712	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R713	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R714	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	ERJ2RMJ333X
R715	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R716	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R717	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R718	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R719	ERJ2GEJ334X	M.RESISTOR CH 1/16W 330K	1	ERJ2RMJ334X
R720	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	ERJ2RMJ333X
R721	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R722	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R723	ERJ6RBB472	M.RESISTOR CH 1/10W 4.7K	1	
R724	ERJ6RBB472	M.RESISTOR CH 1/10W 4.7K	1	
R725	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R726	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R727	ERJ2GEJ124	M.RESISTOR CH 1/16W 120K	1	
R728	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R729	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R730	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R731	ERJ2GEJ563X	M.RESISTOR CH 1/16W 56K	1	
R732	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	ERJ2RMJ333X

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R733	ERJ2GEJ563X	M.RESISTOR CH 1/16W 56K	1	
R734	ERJ3GEYJ2R2V	M.RESISTOR CH 1/10W 2.2	1	D0GB2R2JA002
R735	ERJ3GEYJ2R2V	M.RESISTOR CH 1/10W 2.2	1	D0GB2R2JA002
R736	ERJ6GEYJ4R7V	M.RESISTOR CH 1/10W 4.7	1	
R738	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R739	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R740	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R742	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R743	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R746	ERJ2GEJ155	M.RESISTOR CH 1/16W 1.5M	1	
R747	ERJ3GEYJ470	M.RESISTOR CH 1/10W 47	1	
R756	ERJ2GEJ823X	M.RESISTOR CH 1/16W 82K	1	ERJ2RMJ823X
R757	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R758	ERJ2GEJ563X	M.RESISTOR CH 1/16W 56K	1	
R759	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	ERJ2RMJ333X
R761	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R762	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R763	ERJ2GEJ823X	M.RESISTOR CH 1/16W 82K	1	ERJ2RMJ823X
R764	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R766	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R767	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R769	ERJ2GEJ334X	M.RESISTOR CH 1/16W 330K	1	ERJ2RMJ334X
R772	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R773	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R774	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R775	ERJ3GEYJ221V	M.RESISTOR CH 1/10W 220	1	
R782	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R783	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R784	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R785	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R795	ERJ2GEJ474	M.RESISTOR CH 1/16W 470K	1	
R796	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R797	ERJ2GEJ474	M.RESISTOR CH 1/16W 470K	1	
R798	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R799	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R1108	ERJ2RHD272X	M.RESISTOR CH 1/16W 2.7K	1	NV-GS200GD-S
R1109	ERJ2RHD272X	M.RESISTOR CH 1/16W 2.7K	1	NV-GS200GD-S
R1351	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	NV-GS200GD-S
R1351	ERJ2RHD823X	M.RESISTOR CH 1/16W 82K	1	NV-GS120GD-S
R1352	ERJ2RHD163	M.RESISTOR CH 1/16W 16K	1	NV-GS200GD-S
R1352	ERJ2RHD752	M.RESISTOR CH 1/16W 7.5K	1	NV-GS120GD-S
R1353	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R1354	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R1355	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1371	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R1372	ERJ2RHD911	M.RESISTOR CH 1/16W 910	1	
R1373	ERJ2RHD103X	M.RESISTOR CH 1/16W 10K	1	
R1374	ERJ2GEJ123	M.RESISTOR CH 1/16W 12K	1	
R1375	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R1395	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R1396	ERJ6GEYJ392V	M.RESISTOR CH 1/10W 3.9K	1	NV-GS200GD-S
R1396	ERJ6GEYJ332V	M.RESISTOR CH 1/10W 3.3K	1	NV-GS120GD-S
R1397	ERJ6GEYJ392V	M.RESISTOR CH 1/10W 3.9K	1	NV-GS200GD-S
R1397	ERJ6GEYJ332V	M.RESISTOR CH 1/10W 3.3K	1	NV-GS120GD-S
R1398	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1399	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R1400	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	NV-GS200GD-S

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R1400	ERJ2GEJ392X	M.RESISTOR CH 1/16W 3.9K	1	NV-GS120GD-S ERJ2RMJ392X
R1451	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1452	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	
R3306	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	NV-GS200GD-S
R3316	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	NV-GS200GD-S
R3317	ERJ2RHD122	M.RESISTOR CH 1/16W 1.2K	1	NV-GS200GD-S
R3318	ERJ2RHD101	M.RESISTOR CH 1/16W 100	1	NV-GS200GD-S
R3319	ERJ2RHD272X	M.RESISTOR CH 1/16W 2.7K	1	NV-GS200GD-S
R3402	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	NV-GS200GD-S
R3403	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	NV-GS200GD-S
R3404	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R3406	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	NV-GS200GD-S
R3409	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R3412	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R3414	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	NV-GS200GD-S
R3415	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	NV-GS200GD-S
R3416	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R3417	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	NV-GS200GD-S
R3418	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	NV-GS200GD-S
R3420	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	NV-GS200GD-S
R3421	ERJ2GEJ103Y	M.RESISTOR CH 1/16W 10K	1	NV-GS200GD-S
R3422	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R3423	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	NV-GS200GD-S
R3425	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	NV-GS200GD-S
VZ451	VRT0158	TRANSIENT/SURGE ABSORBER	1	NV-GS200GD-S D4ED12710002
VZ452	VRT0158	TRANSIENT/SURGE ABSORBER	1	NV-GS200GD-S D4ED12710002
VZ453	VRT0158	TRANSIENT/SURGE ABSORBER	1	NV-GS200GD-S D4ED12710002
VZ454	VRT0158	TRANSIENT/SURGE ABSORBER	1	NV-GS200GD-S D4ED12710002
X101	H1A5405B0011	CRYSTAL OSCILLATOR	1	NV-GS200GD-S
X101	H1A2705B0024	CRYSTAL OSCILLATOR	1	NV-GS120GD-S
■	VEP001D4B	SIDE-L C.B.A.		(RTL)
B6101	ML-621S/F9D	BATTERY	1	
C2601	ECJ1VC1H080C	C.CAPACITOR CH 50V 8P	1	
C2603	ECJ1XB1C104K	C.CAPACITOR CH 16V 0.1U	1	ECJ1ZB1C104K
FP6301	K1MN21B00036	CONNECTOR 21P	1	
FP6302	K1MN06B00038	CONNECTOR 6P	1	
IC2601	C1ZBZ0002438	IC	1	
R6301	ERJ6GEYJ102V	M.RESISTOR CH 1/10W 1K	1	
R6303	ERJ3GEYJ471V	M.RESISTOR CH 1/10W 470	1	
R6304	ERJ3GEYJ473V	M.RESISTOR CH 1/10W 47K	1	D0GB473JA002
R6305	ERJ3GEYJ473V	M.RESISTOR CH 1/10W 47K	1	D0GB473JA002
S6302	K0H1BA000436	SWITCH	1	
S6303	VSS0533	SLIDE SWITCH	1	K0D112A00116
VZ6301	VRT0158	TRANSIENT/SURGE ABSORBER	1	D4ED12710002
VZ6307	VRT0158	TRANSIENT/SURGE ABSORBER	1	D4ED12710002

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
X2601	H0A327200093	CRYSTAL OSCILLATOR	1	
■	VEP001C6A	JACK C.B.A.		(RTL)
C3908	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C4001	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C4003	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C4004	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C4901	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C4902	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C4903	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C4904	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C4905	ECST0JY226R	T.CAPACITOR CH 6.3V 22U	1	
C4906	ECST0JY226R	T.CAPACITOR CH 6.3V 22U	1	
C4908	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C4909	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C4910	ECST0JY226R	T.CAPACITOR CH 6.3V 22U	1	
C4913	F1H0J475A009	C.CAPACITOR CH 6.3V 4.7U	1	
D4901	MA2SD2400L	DIODE	1	
FP6201	VJS4264B033	CONNECTOR (FEMALE) 33P	1	
JK3001	VJJ0670	S-JACK	1	K2HZ104A0002
JK3901	K2HZ105E0006	JACK	1	
JK3952	K1FA104A0016	JACK	1	
JK4001	K2HC106B0012	JACK	1	
JK4901	K2HC107B0003	JACK	1	
LB3902	J0JAC0000014	FILTER	1	J0JAC0000016
LB4001	J0JBC0000054	INDUCTOR	1	J0JBC0000059
LB4003	J0JAC0000014	FILTER	1	J0JAC0000016
LB4005	J0JAC0000014	FILTER	1	J0JAC0000016
LB4006	J0JAC0000014	FILTER	1	J0JAC0000016
LB4007	J0JBC0000054	INDUCTOR	1	J0JBC0000059
LB4008	J0JBC0000054	INDUCTOR	1	J0JBC0000059
LB4009	J0JAC0000014	FILTER	1	J0JAC0000016
LB4921	J0JAC0000015	FILTER	1	J0JAC0000017
LB4922	J0JAC0000015	FILTER	1	J0JAC0000017
LB4923	J0JAC0000015	FILTER	1	J0JAC0000017
LB4924	J0JAC0000015	FILTER	1	J0JAC0000017
LB4926	J0JAC0000015	FILTER	1	J0JAC0000017
LB4928	J0JAC0000015	FILTER	1	J0JAC0000017
Q4901	2SD2216J0L	TRANSISTOR	1	
Q4902	2SB1462JHL	TRANSISTOR	1	
Q4903	2SD2216J0L	TRANSISTOR	1	
Q4904	2SB1462JHL	TRANSISTOR	1	
Q4907	B1ABBE000002	TRANSISTOR	1	
Q4908	B1ABBE000002	TRANSISTOR	1	
QR4901	B1GDBEHH0001	TRANSISTOR-RESISTOR	1	
R3920	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R3921	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R3922	D1BA27R0A009	RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3923	D1BA27R0A009	RESISTOR	1	
R3951	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R3952	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R3953	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R3954	ERJ2GE0R00Y	M.RESISTOR CH 1/16W 0	1	
R4001	ERJ2GEJ101Y	M.RESISTOR CH 1/16W 100	1	
R4901	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R4902	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R4904	ERJ3RBD562V	M.RESISTOR CH 1/16W 5.6K	1	
R4905	ERJ2GEJ471X	M.RESISTOR CH 1/16W 470	1	ERJ2RMJ471X
R4906	ERJ3RBD103V	M.RESISTOR CH 1/16W 10K	1	
R4907	VRE0071E154	M.RESISTOR 150K	1	D0HB154ZA004
R4908	ERJ3RBD563	M.RESISTOR CH 1/16W 56K	1	ERJ3RBD563V
R4909	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R4910	ERJ2GEJ562X	M.RESISTOR CH 1/16W 5.6K	1	
R4911	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R4912	ERJ2GEJ471X	M.RESISTOR CH 1/16W 470	1	ERJ2RMJ471X
R4913	ERJ3RBD103V	M.RESISTOR CH 1/16W 10K	1	
R4914	VRE0071E154	M.RESISTOR 150K	1	D0HB154ZA004
R4915	ERJ3RBD563	M.RESISTOR CH 1/16W 56K	1	ERJ3RBD563V
R4916	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R4917	ERJ2GEJ562X	M.RESISTOR CH 1/16W 5.6K	1	
R4918	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R4920	ERJ3RBD562V	M.RESISTOR CH 1/16W 5.6K	1	
R4922	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R4923	ERJ2GEJ683X	M.RESISTOR CH 1/16W 68K	1	ERJ2RMJ683X
R4924	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
S6212	K0L1BB000022	DETECT SWITCH	1	
VZ4001	D4ED1120A002	TRANSIENT/SURGE ABSORBER	1	
VZ4002	D4ED1270A008	TRANSIENT/SURGE ABSORBER	1	
VZ4003	D4ED1270A008	TRANSIENT/SURGE ABSORBER	1	
VZ4004	VRT0158	TRANSIENT/SURGE ABSORBER	1	D4ED12710002
VZ4902	D4ED1120A002	TRANSIENT/SURGE ABSORBER	1	
VZ4903	D4ED1120A002	TRANSIENT/SURGE ABSORBER	1	
■	VEP001D0A	SD HOLDER C.B.A.		(RTL)
C3901	F1G0J105A001	C.CAPACITOR CH 6.3V 1U	1	
C3902	ECJ0EC1H050C	C.CAPACITOR CH 50V 5P	1	
C3905	ECJ0EC1H050C	C.CAPACITOR CH 50V 5P	1	
C3906	ECJ0EC1H050C	C.CAPACITOR CH 50V 5P	1	
C3907	ECJ0EC1H050C	C.CAPACITOR CH 50V 5P	1	
FP6202	K1MN14B00119	CONNECTOR 14P	1	
HS3951	K1NA09E00039	CONNECTOR 9P	1	
R3901	ERJ2GEJ220X	M.RESISTOR CH 1/16W 22	1	ERJ2RMJ220X
R3902	ERJ2GEJ220X	M.RESISTOR CH 1/16W 22	1	ERJ2RMJ220X
R3903	ERJ2GEJ220X	M.RESISTOR CH 1/16W 22	1	ERJ2RMJ220X
R3904	ERJ2GEJ220X	M.RESISTOR CH 1/16W 22	1	ERJ2RMJ220X
R3905	ERJ2GEJ220X	M.RESISTOR CH 1/16W 22	1	ERJ2RMJ220X
R3906	ERJ2GEJ220X	M.RESISTOR CH 1/16W 22	1	ERJ2RMJ220X
R3907	ERJ2GEJ220X	M.RESISTOR CH 1/16W 22	1	ERJ2RMJ220X

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3908	ERJ2GEJ220X	M.RESISTOR CH 1/16W 22	1	ERJ2RMJ220X
R3909	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R3910	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R3912	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R3913	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
■	VEP001C9A	R-RELAY C.B.A.		(RTL)
D6601	B3AAB0000037	LED	1	
FP6601	K1MN06A00016	CONNECTOR 6P	1	
S6601	K0H1BA000436	SWITCH	1	
S6602	K0H1BA000436	SWITCH	1	
■	VEP001C8A	LCD DET C.B.A.		(RTL)
S6701	K0L1BA000102	SWITCH	1	
■	VEP001C2B	SD OPEN C.B.A.		(RTL)
LB6801	VLF1144A102	COIL 1000UH	1	
S6801	K0L1BB000022	DETECT SWITCH	1	
■	VEP001G3A	PL C.B.A.		(RTL)
D924	SML-310MT	LED	1	B3ABB0000091
■	VEP08334B	MONITOR C.B.A.		(RTL) NV-GS200GD-S
■	VEP08336A	MONITOR C.B.A.		(RTL) NV-GS120GD-S
C901	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C902	ECST0GY226R	T.CAPACITOR CH 4V 22U	1	NV-GS200GD-S
C902	ECST0JY106R	T.CAPACITOR CH 6.3V 10U	1	NV-GS120GD-S
C903	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C904	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C905	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C906	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C910	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C911	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C912	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C913	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C914	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	NV-GS200GD-S
C915	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	NV-GS200GD-S
C916	F1J1A475A023	C.CAPACITOR CH 10V 4.7U	1	NV-GS200GD-S
C917	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	NV-GS200GD-S
C919	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	NV-GS120GD-S
C920	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	NV-GS120GD-S
C921	F1J1A475A023	C.CAPACITOR CH 10V 4.7U	1	NV-GS200GD-S
C921	ECJ2YB1C105K	C.CAPACITOR CH 16V 1U	1	NV-GS120GD-S
C922	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	NV-GS120GD-S
C923	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C924	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	NV-GS200GD-S

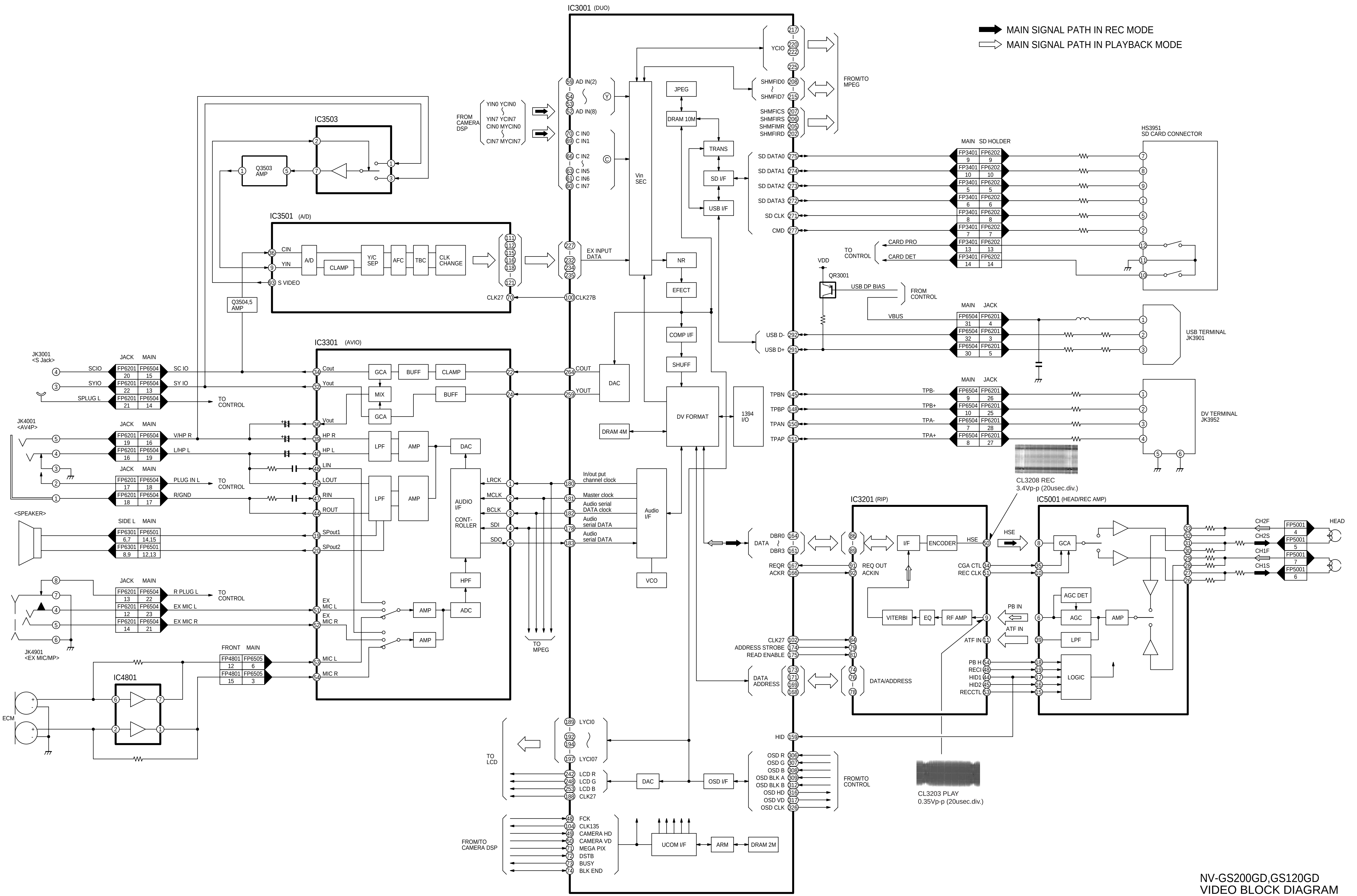
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C925	ECJ2YB1A225K	C.CAPACITOR CH 10V 2.2U	1	NV-GS200GD-S
C925	ECJ2YB1C105K	C.CAPACITOR CH 16V 1U	1	NV-GS120GD-S
C926	ECJ1XB1C104K	C.CAPACITOR CH 16V 0.1U	1	ECJ1ZB1C104K
C933	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
D901	MAZ80560ML	ZENNER DIODE	1	NV-GS200GD-S
D902	02DZ6.2YTPH3	DIODE	1	B0BC6R100014
D905	B3AFB0000061	LED	1	
D906	B3AFB0000061	LED	1	
D907	B3AFB0000061	LED	1	
D908	B3AFB0000061	LED	1	
D909	B3AFB0000061	LED	1	
D910	B3AFB0000061	LED	1	
D911	B3AFB0000061	LED	1	
D912	B3AFB0000061	LED	1	
D913	B3AFB0000061	LED	1	NV-GS120GD-S
FP901	K1MN24B00092	CONNECTOR 24P	1	
FP902	K1MN23B00054	CONNECTOR 23P	1	
FP904	VJS3319B005	CONNECTOR (FEMALE) 5P	1	
IC901	AN12530A-VT	IC	1	
IC903	C0CBCAB00006	IC	1	
L901	G1C100KA0055	CHIP INDUCTOR 10UH	1	NV-GS200GD-S
Q901	XP4654	TRANSISTOR-TRANSISTOR	1	XP04654
Q902	2SD2216J0L	TRANSISTOR	1	
Q903	2SD2216J0L	TRANSISTOR	1	
Q904	2SD2216J0L	TRANSISTOR	1	
Q905	XP4654	TRANSISTOR-TRANSISTOR	1	XP04654
Q906	2SD2216J0L	TRANSISTOR	1	
Q907	2SD2216J0L	TRANSISTOR	1	
Q908	2SD2216J0L	TRANSISTOR	1	
Q909	2SD2216J0L	TRANSISTOR	1	
Q910	2SD2216J0L	TRANSISTOR	1	
Q911	2SD2216J0L	TRANSISTOR	1	NV-GS120GD-S
Q912	B1ADBE000001	TRANSISTOR	1	NV-GS120GD-S
Q913	B1ADBE000001	TRANSISTOR	1	NV-GS200GD-S
Q913	XP1501	TRANSISTOR-TRANSISTOR	1	NV-GS120GD-S XP01501
Q914	B1ADGD000005	TRANSISTOR	1	
Q915	2SD2216J0L	TRANSISTOR	1	
Q916	B1ADBE000001	TRANSISTOR	1	
QR902	UN9214JTX	TRANSISTOR-RESISTOR	1	NV-GS120GD-S
QR906	UN9214JTX	TRANSISTOR-RESISTOR	1	NV-GS120GD-S
QR907	B1GDBEHH0001	TRANSISTOR-RESISTOR	1	NV-GS120GD-S
QR913	UNR9215J0L	TRANSISTOR-RESISTOR	1	
R901	ERJ3GEYD153V	M.RESISTOR CH 1/10W 15K	1	D0HB153ZA002
R902	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	1	D0GBR00JA017
R903	ERJ3GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	NV-GS200GD-S
R903	ERJ3GEYJ682V	M.RESISTOR CH 1/10W 6.8K	1	NV-GS120GD-S D0GB682JA002
R905	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R906	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R907	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R908	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	1	NV-GS120GD-S D0GBR00JA017

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R909	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R910	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R911	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R912	ERJ3GEYJ102A	M.RESISTOR CH 1/10W 1K	1	
R913	ERJ3GEYJ102A	M.RESISTOR CH 1/10W 1K	1	
R915	ERJ3GEYJ102A	M.RESISTOR CH 1/10W 1K	1	
R917	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	1	D0GBR00JA017
R918	ERJ3RED270	M.RESISTOR CH 1/16W 27	1	
R919	ERJ3GEYJ683V	M.RESISTOR CH 1/10W 68K	1	D0GB683JA002
R920	ERJ3GEYJ101	M.RESISTOR CH 1/10W 100	1	D0GB101JA002
R921	ERJ3GEYJ101	M.RESISTOR CH 1/10W 100	1	D0GB101JA002
R922	ERJ3GEYJ101	M.RESISTOR CH 1/10W 100	1	D0GB101JA002
R923	ERJ3GEYJ101	M.RESISTOR CH 1/10W 100	1	NV-GS200GD-S D0GB101JA002
R923	ERJ3RBD103V	M.RESISTOR CH 1/16W 10K	1	NV-GS120GD-S
R924	ERJ3RED270	M.RESISTOR CH 1/16W 27	1	
R925	ERJ3RED270	M.RESISTOR CH 1/16W 27	1	
R926	ERJ3GEYJ102A	M.RESISTOR CH 1/10W 1K	1	
R927	ERJ3GEYJ104	M.RESISTOR CH 1/10W 100K	1	NV-GS200GD-S
R927	ERJ3RBD561	M.RESISTOR CH 1/16W 560	1	NV-GS120GD-S
R928	ERJ3GEYJ333V	M.RESISTOR CH 1/10W 33K	1	NV-GS120GD-S D0GB333JA002
R929	ERA3YED332	CHIP RESISTOR	1	NV-GS120GD-S
R930	ERJ3RBD103V	M.RESISTOR CH 1/16W 10K	1	NV-GS200GD-S
R930	ERJ3GEYJ333V	M.RESISTOR CH 1/10W 33K	1	NV-GS120GD-S D0GB333JA002
R931	ERJ3RED270	M.RESISTOR CH 1/16W 27	1	
R932	ERJ3RED270	M.RESISTOR CH 1/16W 27	1	
R933	ERJ3RED270	M.RESISTOR CH 1/16W 27	1	
R934	ERJ3RED270	M.RESISTOR CH 1/16W 27	1	
R935	ERJ3RED270	M.RESISTOR CH 1/16W 27	1	
R936	ERJ3RED270	M.RESISTOR CH 1/16W 27	1	NV-GS120GD-S
R937	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	NV-GS200GD-S
R939	ERJ3GEYJ472A	M.RESISTOR CH 1/10W 4.7K	1	NV-GS200GD-S
R939	ERJ3RBD103V	M.RESISTOR CH 1/16W 10K	1	NV-GS120GD-S
R940	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	NV-GS120GD-S
R941	ERJ3RBD122V	M.RESISTOR CH 1/16W 1.2K	1	NV-GS200GD-S
R941	ERJ3RBD103V	M.RESISTOR CH 1/16W 10K	1	NV-GS120GD-S
R942	ERJ3RBD273V	M.RESISTOR CH 1/16W 27K	1	NV-GS200GD-S
R943	ERJ3RBD103V	M.RESISTOR CH 1/16W 10K	1	NV-GS200GD-S
R946	ERJ3RED510	M.RESISTOR CH 1/16W 51	1	
R947	ERJ3GEYJ333V	M.RESISTOR CH 1/10W 33K	1	NV-GS120GD-S D0GB333JA002
R948	ERJ3GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R949	ERJ3GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R952	ERJ3GEYJ473V	M.RESISTOR CH 1/10W 47K	1	NV-GS120GD-S D0GB473JA002
R953	ERJ3GEYJ332V	M.RESISTOR CH 1/10W 3.3K	1	NV-GS120GD-S D0GB332JA002
R954	ERJ3GEYD153V	M.RESISTOR CH 1/10W 15K	1	NV-GS120GD-S D0HB153ZA002
R955	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	NV-GS120GD-S
R956	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	NV-GS120GD-S
R957	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	NV-GS120GD-S
R959	ERJ3GEYJ473V	M.RESISTOR CH 1/10W 47K	1	D0GB473JA002
R960	ERJ3GEYJ183V	M.RESISTOR CH 1/10W 18K	1	NV-GS200GD-S D0GB183JA002
R960	ERJ3GEYJ104	M.RESISTOR CH 1/10W 100K	1	NV-GS120GD-S
R961	ERJ3GEYJ823V	M.RESISTOR CH 1/10W 82K	1	D0GB823JA002
R962	ERJ3GEYJ224V	M.RESISTOR CH 1/10W 220K	1	D0GB224JA002
R963	ERJ3GEYJ104	M.RESISTOR CH 1/10W 100K	1	NV-GS200GD-S
R983	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	NV-GS200GD-S
R985	ERJ3GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	NV-GS200GD-S
R986	ERJ3GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	NV-GS200GD-S

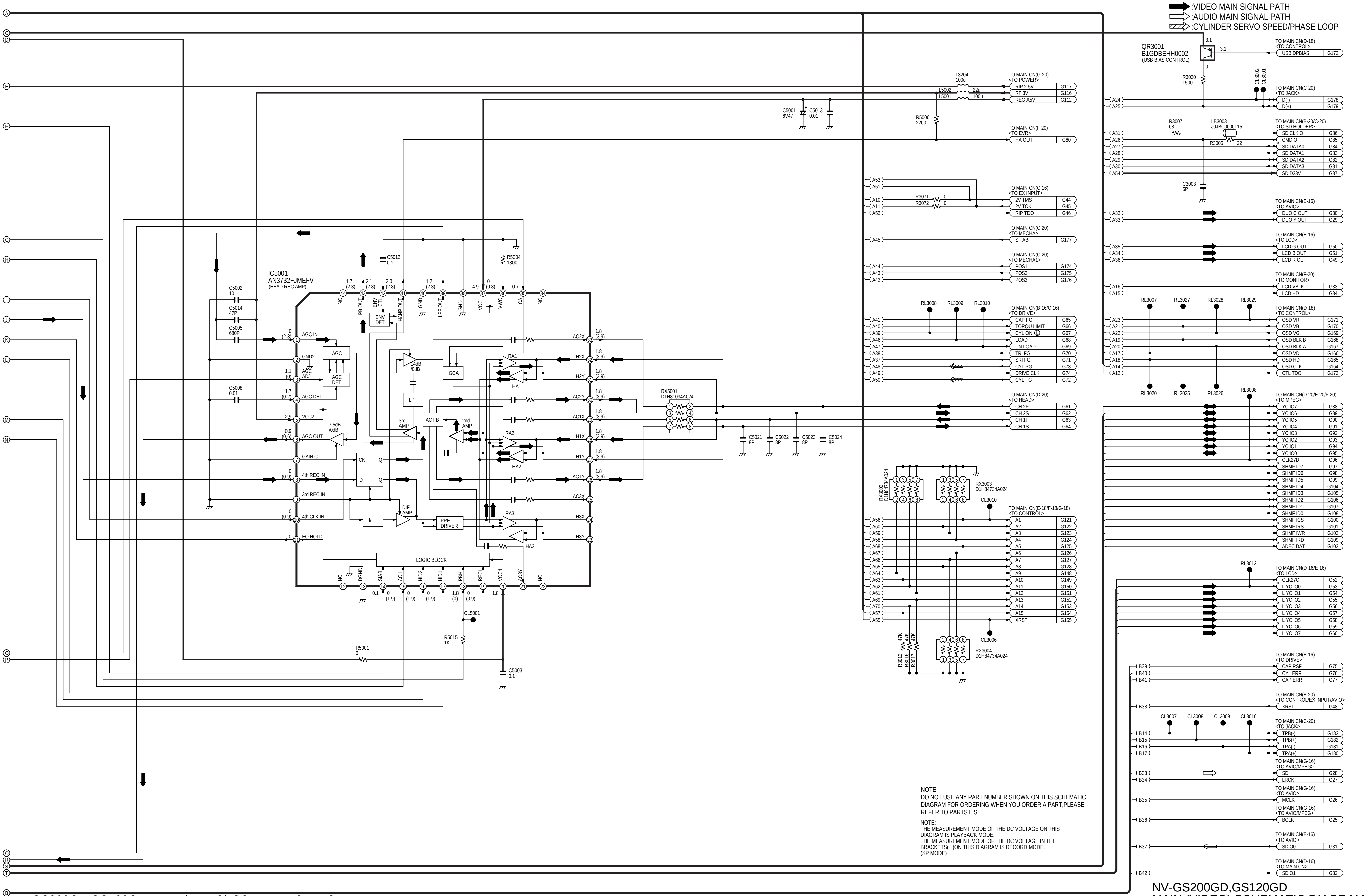
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
VZ902	VRT0158	TRANSIENT/SURGE ABSORBER	1	D4ED12710002
■	VEP29159A	EVF B/L C.B.A.		(RTL)
C801	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C802	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C803	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
D801	B3AFB0000052	LED	1	
D802	MAZ80560ML	ZENNER DIODE	1	
D803	02DZ6.2YTPH3	DIODE	1	B0BC6R100014
D804	MA3S13300L	DIODE	1	
FP801	VJS3320D018	CONNECTOR (FEMALE) 18P	1	K1MN18B00037
FP802	K1MN20B00106	CONNECTOR 20P	1	
Q801	2SD2216J0L	TRANSISTOR	1	
R801	ERJ3GEYJ472A	M.RESISTOR CH 1/10W 4.7K	1	
R802	ERJ3GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R803	ERJ3GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R804	ERJ3RED680	M.RESISTOR CH 1/16W 68	1	ERJ3RED680V
R805	ERJ3GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R806	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
■	VEP04854A	FRONT C.B.A.		NV-GS200GD-S
■	VEP04854B	FRONT C.B.A.		NV-GS120GD-S
C491	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C492	ECJ1VB1A224K	C.CAPACITOR CH 10V 0.22U	1	
C493	ECJ1VB1A224K	C.CAPACITOR CH 10V 0.22U	1	
C4801	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C4802	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C4803	ECUE1E332KBQ	C.CAPACITOR CH 25V 3300P	1	ECJ0EB1E332K
C4804	ECUE1E332KBQ	C.CAPACITOR CH 25V 3300P	1	ECJ0EB1E332K
C4805	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C4806	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C4807	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	1	F1J0J475A008
C4808	ECST0JY226R	T.CAPACITOR CH 6.3V 22U	1	
C4811	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C4812	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C4899	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	1	
C6401	ECJ2FB0J106K	C.CAPACITOR CH 6.3V 10U	1	F1J0J106A014
C7001	ECJ0EB1C223K	C.CAPACITOR CH 16V 0.022U	1	NV-GS200GD-S
C7002	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	NV-GS200GD-S
C7003	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	NV-GS200GD-S
C7004	F2AZZ6500001	E.CAPACITOR	1	NV-GS200GD-S
C7006	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	NV-GS200GD-S
C7010	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	NV-GS200GD-S
D491	MA132WA	DIODE	1	MA3S132D
D6801	B3AAB0000037	LED	1	
D6802	B3GA00000037	PHOTO DIODE	1	
D7003	B0ECKT000001	DIODE	1	NV-GS200GD-S
D7004	MA5Z300-L	DIODE	1	NV-GS200GD-S

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D7006	MA2SD2400L	DIODE	1	NV-GS200GD-S
FP4801	K1MN24A00051	CONNECTOR 24P	1	NV-GS200GD-S
FP4801	K1MN18A00055	CONNECTOR 18P	1	NV-GS120GD-S
FP7001	VJS4297B006	CONNECTOR (FEMALE) 6P	1	NV-GS200GD-S K1MN06B00057
FP7002	VJS3971D027	CONNECTOR (FEMALE) 27P	1	NV-GS200GD-S K1MN27B00008
IC4801	C0ABBB000105	IC	1	
IC7001	C0JBAA000115	IC	1	NV-GS200GD-S
IC7003	B1JBLP000004	TRANSISTOR	1	NV-GS200GD-S
IR6401	B3RAB0000030	IR RECEIVER	1	
L7001	G1C560MA0024	CHIP INDUCTOR 56UH	1	NV-GS200GD-S
Q491	2SD1030	TRANSISTOR	1	
Q492	B1ABBE000002	TRANSISTOR	1	
Q4803	2SD1819AWL	TRANSISTOR	1	
Q7001	B1BDDG000007	TRANSISTOR	1	NV-GS200GD-S
Q7002	2SB1462JHL	TRANSISTOR	1	NV-GS200GD-S
Q7003	B1ABBE000002	TRANSISTOR	1	NV-GS200GD-S
QR7001	UN921F	TRANSISTOR	1	NV-GS200GD-S
R491	ERJ2GEJ225X	M.RESISTOR CH 1/16W 2.2M	1	ERJ2RMJ225X
R492	ERJ2GEJ334X	M.RESISTOR CH 1/16W 330K	1	ERJ2RMJ334X
R493	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R494	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R495	ERJ3GEYJ106	M.RESISTOR CH 1/10W 10M	1	
R4801	ERJ6GEYJ392V	M.RESISTOR CH 1/10W 3.9K	1	
R4802	ERJ6GEYJ392V	M.RESISTOR CH 1/10W 3.9K	1	
R4803	ERJ2GEJ683X	M.RESISTOR CH 1/16W 68K	1	ERJ2RMJ683X
R4804	ERJ2GEJ683X	M.RESISTOR CH 1/16W 68K	1	ERJ2RMJ683X
R4805	ERJ2GEJ394X	M.RESISTOR CH 1/16W 390K	1	ERJ2RMJ394X
R4806	ERJ2GEJ394X	M.RESISTOR CH 1/16W 390K	1	ERJ2RMJ394X
R4813	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R4814	ERJ2GEJ333X	M.RESISTOR CH 1/16W 33K	1	ERJ2RMJ333X
R4815	ERJ2GEJ472X	M.RESISTOR CH 1/16W 4.7K	1	ERJ2RMJ472X
R6401	ERJ3GEY0R00A	M.RESISTOR CH 1/10W 0	1	
R6402	ERJ3GEYJ470	M.RESISTOR CH 1/10W 47	1	
R6803	ERJ3GEYJ331V	M.RESISTOR CH 1/10W 330	1	
R7001	ERJ6GEYJ330V	M.RESISTOR CH 1/10W 33	1	NV-GS200GD-S
R7002	ERJ2GEJ393X	M.RESISTOR CH 1/16W 39K	1	NV-GS200GD-S ERJ2RMJ393X
R7003	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	NV-GS200GD-S
R7004	ERJ2GEJ822X	M.RESISTOR CH 1/16W 8.2K	1	NV-GS200GD-S ERJ2RMJ822X
R7005	ERJ2GEJ334X	M.RESISTOR CH 1/16W 330K	1	NV-GS200GD-S ERJ2RMJ334X
R7006	ERJ2GEJ564X	M.RESISTOR CH 1/16W 560K	1	NV-GS200GD-S ERJ2RMJ564X
R7008	ERJ2GEJ330X	M.RESISTOR CH 1/16W 33	1	NV-GS200GD-S
R7010	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	NV-GS200GD-S
R7018	ERJ2GEJ681X	M.RESISTOR CH 1/16W 680	1	NV-GS200GD-S ERJ2RMJ681X
R7019	ERJ2GEJ220X	M.RESISTOR CH 1/16W 22	1	NV-GS200GD-S ERJ2RMJ220X
R7022	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	NV-GS200GD-S
T7001	G5DYA0000033	SWITCHING TRANSFORMER	1	NV-GS200GD-S G5DYA0000032
VZ4801	D4ED1270A003	TRANSIENT/SURGE ABSORBER	1	
VZ4802	D4ED1270A003	TRANSIENT/SURGE ABSORBER	1	

17. Schematic Diagram for printing with A4


MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
IC3001 (DUO)
IC3503
Q3503 AMP
IC3501 (A/D)
CIN
YIN
S VIDEO
A/D
CLAMP
Y/C SEP
AFC
TBC
CLK CHANGE
CLK27
Q3504,5 AMP
IC3301 (AVIO)
GCA
BUFF
CLAMP
MIX
LPF
AMP
DAC
AUDIO I/F CONT-ROLLER
HPF
ADC
LRCK
MCLK
BCLK
SDI
SDO
TO MPEG
JK3001 <S Jack>
SCIO
SYIO
SPLUG L
JACK
MAIN
FP6201
FP6504
SC IO
SY IO
TO CONTROL
JK4001 <AV4P>
V/HP R
L/HP L
PLUG IN L
R/GND
<SPEAKER>
SIDE L
FP6301
FP6501
SPout1
SPout2
R PLUG L
EX MIC L
EX MIC R
JK4901 <EX MIC/MP>
FRONT
FP4801
FP6505
MIC L
MIC R
IC4801
ECM
FROM CAMERA DSP
YIN0 YCIN0
YIN7 YCIN7
CIN0 MYCIN0
CIN7 MYCIN7
AD IN(2)
AD IN(8)
C IN0
C IN1
C IN2
C IN5
C IN6
C IN7
EX INPUT DATA
CLK27B
COUT
YOUT
In/out put channel clock
Master clock
Audio serial DATA clock
Audio serial DATA
Vin SEC
JPEG
DRAM 10M
TRANS
SD I/F
USB I/F
NR
EFECT
COMP I/F
SHUFF
DV FORMAT
DRAM 4M
1394 I/O
Audio I/F
VCO
YCIO
SHMFID0
SHMFID7
SHMFICS
SHMFIRS
SHMFIMR
SHMFIRD
FROM/TO MPEG
SD DATA0
SD DATA1
SD DATA2
SD DATA3
SD CLK
CMD
MAIN
SD HOLDER
FP3401
FP6202
HS3951 SD CARD CONNECTOR
TO CONTROL
CARD PRO
CARD DET
VDD
QR3001
USB DP BIAS
FROM CONTROL
VBUS
USB D-
USB D+
FP6504
FP6201
USB TERMINAL JK3901
TPBN
TPBP
TPAN
TPAP
TPB-
TPB+
TPA-
TPA+
DV TERMINAL JK3952
CL3208 REC
3.4Vp-p (20usec.div.)
IC3201 (RIP)
IC5001 (HEAD/REC AMP)
DATA
DBR0
DBR3
REQR
ACKR
REQ OUT
ACKIN
I/F
ENCODER
HSE
CGA CTL
REC CLK
GCA
VITERBI
EQ
RF AMP
PB IN
ATF IN
AGC DET
AGC
AMP
LPF
LOGIC
CLK27
ADDRESS STROBE
READ ENABLE
DATA ADDRESS
DATA/ADDRESS
PB H
RECI
HID1
HID2
RECCTL
HID
CH2F
CH2S
CH1F
CH1S
FP5001
HEAD
LYCI0
LYCI07
TO LCD
LCD R
LCD G
LCD B
CLK27
DAC
OSD I/F
OSD R
OSD G
OSD B
OSD BLK A
OSD BLK B
OSD HD
OSD VD
OSD CLK
FROM/TO CONTROL
CL3203 PLAY
0.35Vp-p (20usec.div.)
FCK
CLK135
CAMERA HD
CAMERA VD
MEGA PIX
DSTB
BUSY
BLK END
FROM/TO CAMERA DSP
UCOM I/F
ARM
DRAM 2M

NV-GS200GD,GS120GD
VIDEO BLOCK DIAGRAM


IC5001
AN3732FJMEFV
(HEAD REC AMP)
AGC IN
GND2
AGC ADJ
AGC DET
VCC2
AGC OUT
GAIN CTL
4th REC IN
3rd REC IN
4th CLK IN
EQ HOLD
AGC
AGC DET
7.5dB /0dB
14dB /0dB
LPF
GCA
ENV DET
3rd AMP
2nd AMP
AC FB
DIF AMP
I/F
PRE DRIVER
LOGIC BLOCK
RA1
RA2
RA3
HA1
HA2
HA3
AC2X
H2X
H2Y
AC2Y
AC1X
H1X
H1Y
ACTY
AC3X
H3X
H3Y
NC
PB OUT
ENV CTL
HANP OUT
GND2
LPF OUT
GND1
VCC1
VWC
CA
DGND
SIAB
ACIL
HID2
HID1
PBH
REC
VCC4
AC2Y
C5002 10
C5014 47P
C5005 680P
C5008 0.01
C5012 0.1
R5004 1800
R5001 0
R5015 1K
C5003 0.1
CL5001
RX5001 D1H81034A024
C5021 8P
C5022 8P
C5023 8P
C5024 8P
L3204 100u
L5002 22u
L5001 100u
C5001 6V47
C5013 0.01
R5006 2200
TO MAIN CN(G-20) <TO POWER>
RIP 2.5V G117
RF 3V G116
REG A5V G112
TO MAIN CN(F-20) <TO EVR>
HA OUT G80
TO MAIN CN(C-16) <TO EX INPUT>
R3071 0
R3072 0
2V TMS G44
2V TCK G45
RIP TDO G46
TO MAIN CN(C-20) <TO MECHA>
S TAB G177
TO MAIN CN(C-20) <TO MECHA1>
POS1 G174
POS2 G175
POS3 G176
RL3008
RL3009
RL3010
TO MAIN CN(B-16/C-16) <TO DRIVE>
CAP FG G65
TORQU LIMIT G66
CYL ON G67
LOAD G68
UN LOAD G69
TRI FG G70
SRI FG G71
CYL PG G73
DRIVE CLK G74
CYL FG G72
TO MAIN CN(D-20) <TO HEAD>
CH 2F G61
CH 2S G62
CH 1F G63
CH 1S G64
RX3002 D1H84734A024
RX3003 D1H84734A024
RX3004 D1H84734A024
CL3010
CL3006
R3012 47K
R3016 47K
R3017 47K
TO MAIN CN(E-18/F-18/G-18) <TO CONTROL>
A1 G121
A2 G122
A3 G123
A4 G124
A5 G125
A6 G126
A7 G127
A8 G128
A9 G148
A10 G149
A11 G150
A12 G151
A13 G152
A14 G153
A15 G154
XRST G155
QR3001
B1GDBEHH0002
(USB BIAS CONTROL)
TO MAIN CN(D-18) <TO CONTROL>
USB DPBIAS G172
R3030 1500
CL3002
CL3001
TO MAIN CN(C-20) <TO JACK>
D(-) G178
D(+) G179
R3007 68
LB3003 J0JBC0000115
R3005 22
TO MAIN CN(B-20/C-20) <TO SD HOLDER>
SD CLK O G86
CMD O G85
SD DATA0 G84
SD DATA1 G83
SD DATA2 G82
SD DATA3 G81
SD D33V G87
C3003 5P
TO MAIN CN(E-16) <TO AVIO>
DUO C OUT G30
DUO Y OUT G29
TO MAIN CN(E-16) <TO LCD>
LCD G OUT G50
LCD B OUT G51
LCD R OUT G49
TO MAIN CN(F-20) <TO MONITOR>
LCD VBLK G33
LCD HD G34
RL3007
RL3027
RL3028
RL3029
TO MAIN CN(D-18) <TO CONTROL>
OSD VR G171
OSD VB G170
OSD VG G169
OSD BLK B G168
OSD BLK A G167
OSD VD G166
OSD HD G165
OSD CLK G164
CTL TDO G173
RL3020
RL3025
RL3026
RL3008
TO MAIN CN(D-20/E-20/F-20) <TO MPEG>
YC IO7 G88
YC IO6 G89
YC IO5 G90
YC IO4 G91
YC IO3 G92
YC IO2 G93
YC IO1 G94
YC IO0 G95
CLK27D G96
SHMF ID7 G97
SHMF ID6 G98
SHMF ID5 G99
SHMF ID4 G104
SHMF ID3 G105
SHMF ID2 G106
SHMF ID1 G107
SHMF ID0 G108
SHMF ICS G100
SHMF IRS G101
SHMF IWR G102
SHMF IRD G109
ADEC DAT G103
RL3012
TO MAIN CN(D-16/E-16) <TO LCD>
CLK27C G52
L YC IO0 G53
L YC IO1 G54
L YC IO2 G55
L YC IO3 G56
L YC IO4 G57
L YC IO5 G58
L YC IO6 G59
L YC IO7 G60
TO MAIN CN(B-16) <TO DRIVE>
CAP RSF G75
CYL ERR G76
CAP ERR G77
TO MAIN CN(B-20) <TO CONTROL/EX INPUT/AVIO>
XRST G48
CL3007
CL3008
CL3009
CL3010
TO MAIN CN(C-20) <TO JACK>
TPB(-) G183
TPB(+) G182
TPA(-) G181
TPA(+) G180
TO MAIN CN(G-16) <TO AVIO/MPEG>
SDI G28
LRCK G27
TO MAIN CN(G-16) <TO AVIO>
MCLK G26
TO MAIN CN(G-16) <TO AVIO/MPEG>
BCLK G25
TO MAIN CN(E-16) <TO AVIO>
SD O0 G31
TO MAIN CN(D-16) <TO MAIN CN>
SD O1 G32
27
28
29
30
31
32
33
34
35
36
37
38

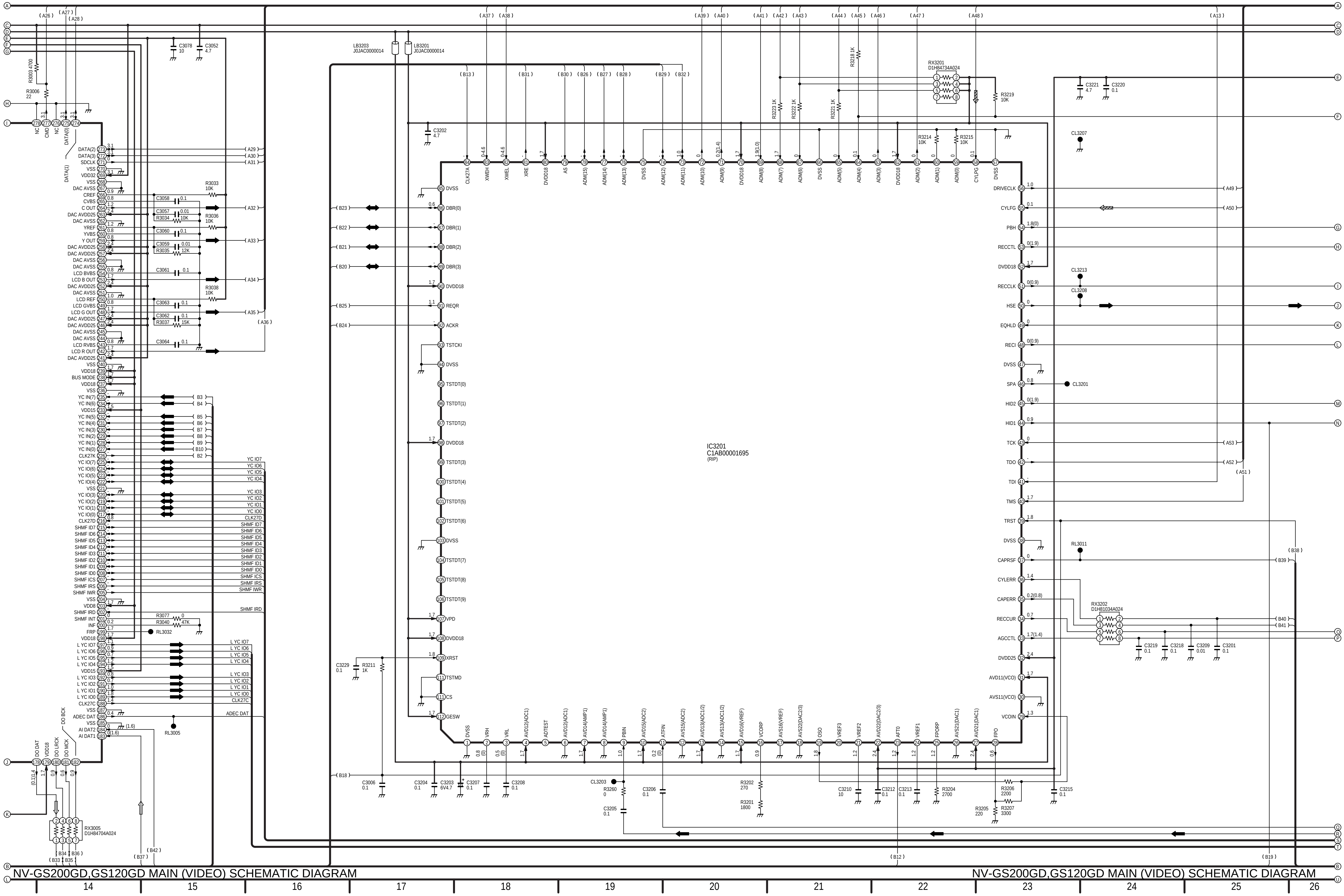
■➡:VIDEO MAIN SIGNAL PATH
⇨:AUDIO MAIN SIGNAL PATH
▨➡:CYLINDER SERVO SPEED/PHASE LOOP

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE.
(SP MODE)

NV-GS200GD,GS120GD MAIN (VIDEO) SCHEMATIC DIAGRAM

NV-GS200GD,GS120GD
MAIN (VIDEO) SCHEMATIC DIAGRAM


IC3201
C1AB00001695
(RIP)
LB3203
J0JAC0000014
LB3201
J0JAC0000014
C3078
10
C3052
4.7
C3202
4.7
RX3201
D1H84734A024
R3219
10K
R3218 1K
R3223 1K
R3222 1K
R3221 1K
R3214
10K
R3215
10K
C3221
4.7
C3220
0.1
CL3207
CL3213
CL3208
CL3201
RL3011
RX3202
D1H81034A024
C3219
0.1
C3218
0.1
C3209
0.01
C3201
0.1
R3003 4700
R3006
22
C3058
0.1
C3057
0.01
R3034
10K
C3060
0.1
C3059
0.01
R3035
12K
C3061
0.1
C3063
0.1
C3062
0.1
R3037
15K
C3064
0.1
R3033
10K
R3036
10K
R3038
10K
R3077
0
R3040
47K
RL3032
RL3005
RX3005
D1H84704A024
C3229
0.1
R3211
1K
C3006
0.1
C3204
0.1
C3203
6V4.7
C3207
0.1
C3208
0.1
CL3203
R3260
0
C3205
0.1
C3206
0.1
R3202
270
R3201
1800
C3210
10
C3212
0.1
C3213
0.1
R3204
2700
R3206
2200
R3205
220
R3207
3300
C3215
0.1
DATA(2)
DATA(3)
SDCLK
VSS
VDD32
DAC AVSS
CREF
CVBS
C OUT
DAC AVDD25
YREF
YVBS
Y OUT
LCD BVBS
LCD B OUT
LCD REF
LCD GVBS
LCD G OUT
LCD RVBS
LCD R OUT
VDD18
BUS MODE
VDD15
YC IN(7)
YC IN(6)
YC IN(5)
YC IN(4)
YC IN(3)
YC IN(2)
YC IN(1)
YC IN(0)
CLK27K
YC IO(7)
YC IO(6)
YC IO(5)
YC IO(4)
YC IO(3)
YC IO(2)
YC IO(1)
YC IO(0)
CLK27D
SHMF ID7
SHMF ID6
SHMF ID5
SHMF ID4
SHMF ID3
SHMF ID2
SHMF ID1
SHMF ID0
SHMF ICS
SHMF IRS
SHMF IWR
VDD8
SHMF IRD
SHMF INT
INF
FRP
L YC IO7
L YC IO6
L YC IO5
L YC IO4
L YC IO3
L YC IO2
L YC IO1
L YC IO0
CLK27C
ADEC DAT
AI DAT2
AI DAT1
DO DAT
DO LRCK
DO MCK
DO BCK
NC
CMD
DATA(0)
DATA(1)
DVSS
DBR(0)
DBR(1)
DBR(2)
DBR(3)
DVDD18
REQR
ACKR
TSTCKI
TSTDT(0)
TSTDT(1)
TSTDT(2)
TSTDT(3)
TSTDT(4)
TSTDT(5)
TSTDT(6)
TSTDT(7)
TSTDT(8)
TSTDT(9)
VPD
XRST
TSTMD
CS
GESW
CLK27A
XWEH
XWEL
XRE
AS
ADM(15)
ADM(14)
ADM(13)
ADM(12)
ADM(11)
ADM(10)
ADM(9)
ADM(8)
ADM(7)
ADM(6)
ADM(5)
ADM(4)
ADM(3)
ADM(2)
ADM(1)
ADM(0)
CYLPG
DRIVECLK
CYLFG
PBH
RECCTL
RECCLK
HSE
EQHLD
RECI
SPA
HID2
HID1
TCK
TDO
TDI
TMS
TRST
CAPRSF
CYLERR
CAPERR
RECCUR
AGCCTL
DVDD25
AVD11(VCO)
AVS11(VCO)
VCOIN
VRH
VRL
AVD12(ADC1)
ADTEST
AVD14(AMP1)
PBIN
AVD15(ADC2)
ATFIN
AVS15(ADC2)
AVD13(ADC1/2)
AVS13(ADC1/2)
AVD16(VREF)
VCORP
AVS16(VREF)
AVS22(DAC2/3)
OSO
VREF3
VREF2
AVD22(DAC2/3)
AFT0
VREF1
FPORP
AVS21(DAC1)
AVD21(DAC1)
FPO
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
14
15
16
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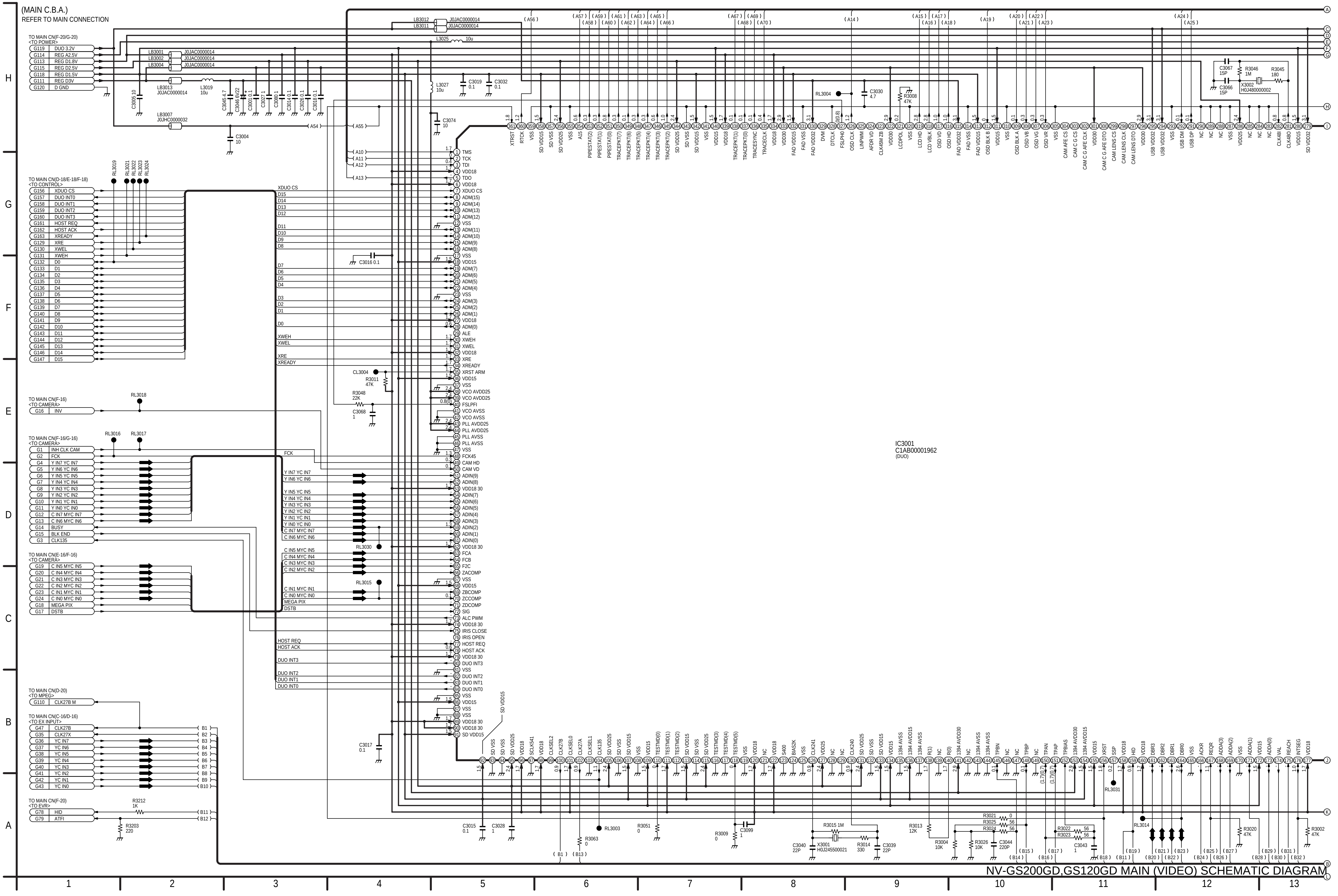
NV-GS200GD,GS120GD MAIN (VIDEO) SCHEMATIC DIAGRAM

NV-GS200GD,GS120GD MAIN (VIDEO) SCHEMATIC DIAGRAM

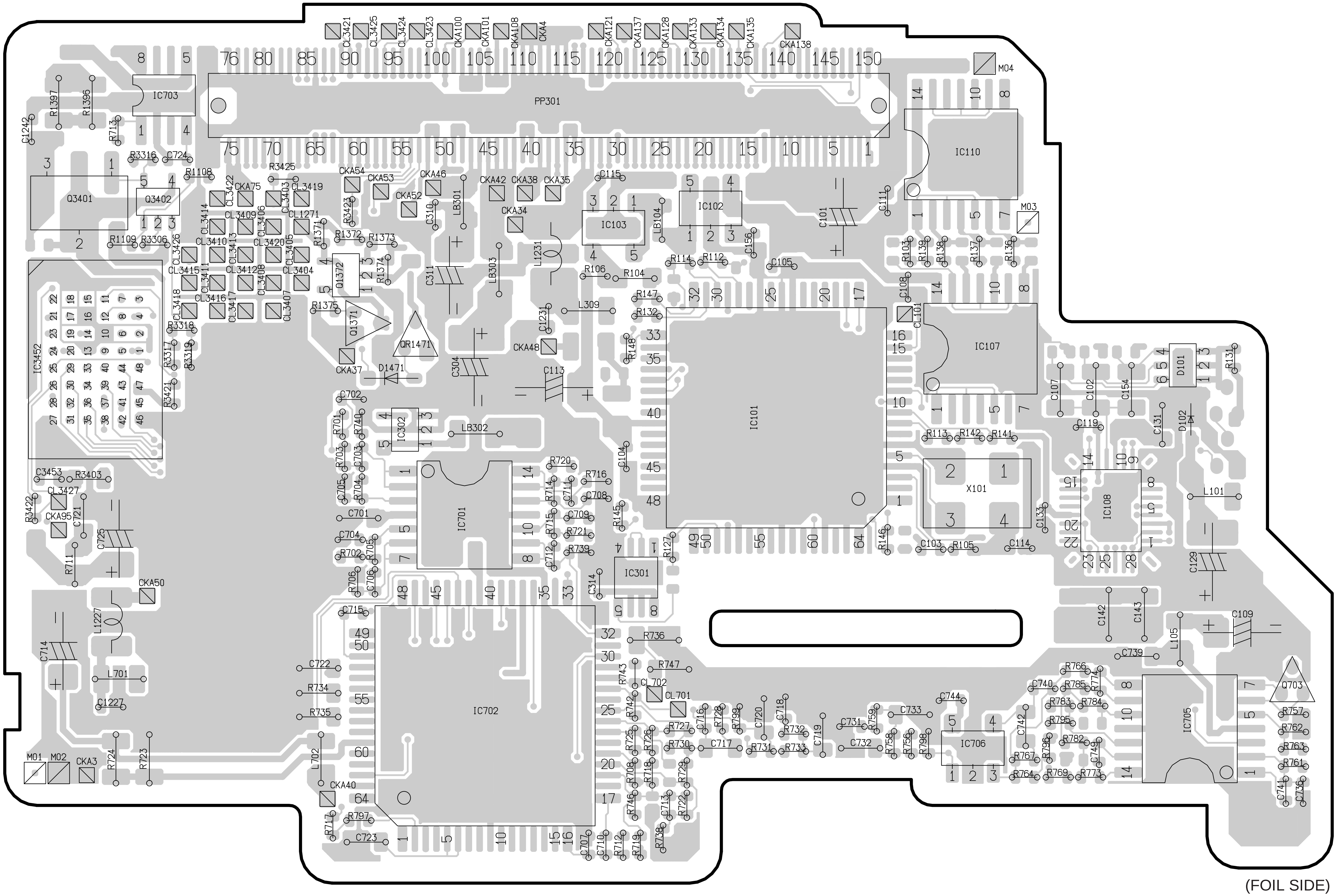

(MAIN C.B.A.)
REFER TO MAIN CONNECTION
TO MAIN CN(F-20/G-20) <TO POWER>
G119 DUO 3.2V
G114 REG A2.5V
G113 REG D1.8V
G115 REG D2.5V
G118 REG D1.5V
G111 REG D3V
G120 D GND
LB3001 J0JAC0000014
LB3002 J0JAC0000014
LB3004 J0JAC0000014
LB3013 J0JAC0000014
L3019 10u
LB3007 J0JHC0000032
LB3012 J0JAC0000014
LB3011 J0JAC0000014
L3025 10u
L3027 10u
C3005 10
C3045 4.7
C3046 6V22
C3001 0.1
C3027 1
C3080 1
C3010 0.1
C3026 0.1
C3018 0.1
C3019 0.1
C3032 0.1
C3074 10
C3004 10
TO MAIN CN(D-18/E-18/F-18) <TO CONTROL>
RL3019 RL3021 RL3022 RL3023 RL3024
G156 XDUO CS
G157 DUO INT0
G158 DUO INT1
G159 DUO INT2
G160 DUO INT3
G161 HOST REQ
G162 HOST ACK
G163 XREADY
G129 XRE
G130 XWEL
G131 XWEH
G132 D0
G133 D1
G134 D2
G135 D3
G136 D4
G137 D5
G138 D6
G139 D7
G140 D8
G141 D9
G142 D10
G143 D11
G144 D12
G145 D13
G146 D14
G147 D15
TO MAIN CN(F-16) <TO CAMERA>
G16 INV
RL3018
TO MAIN CN(F-16/G-16) <TO CAMERA>
RL3016 RL3017
G1 INH CLK CAM
G2 FCK
G4 Y IN7 YC IN7
G5 Y IN6 YC IN6
G6 Y IN5 YC IN5
G7 Y IN4 YC IN4
G8 Y IN3 YC IN3
G9 Y IN2 YC IN2
G10 Y IN1 YC IN1
G11 Y IN0 YC IN0
G12 C IN7 MYC IN7
G13 C IN6 MYC IN6
G14 BUSY
G15 BLK END
G3 CLK135
TO MAIN CN(E-16/F-16) <TO CAMERA>
G19 C IN5 MYC IN5
G20 C IN4 MYC IN4
G21 C IN3 MYC IN3
G22 C IN2 MYC IN2
G23 C IN1 MYC IN1
G24 C IN0 MYC IN0
G18 MEGA PIX
G17 DSTB
TO MAIN CN(D-20) <TO MPEG>
G110 CLK27B M
TO MAIN CN(C-16/D-16) <TO EX INPUT>
G47 CLK27B
G35 CLK27X
G36 YC IN7
G37 YC IN6
G38 YC IN5
G39 YC IN4
G40 YC IN3
G41 YC IN2
G42 YC IN1
G43 YC IN0
TO MAIN CN(F-20) <TO EVR>
G78 HID
G79 ATFI
R3212 1K
R3203 220
C3016 0.1
CL3004
R3011 47K
R3048 22K
C3068 1
RL3030
RL3015
C3017 0.1
IC3001
C1AB00001962
(DUO)
1 TMS
2 TCK
3 TDI
4 VDD18
5 TDO
6 VDD18
7 XDUO CS
8 ADM(15)
9 ADM(14)
10 ADM(13)
11 ADM(12)
12 VSS
13 ADM(11)
14 ADM(10)
15 ADM(9)
16 ADM(8)
17 VSS
18 VDD15
19 ADM(7)
20 ADM(6)
21 ADM(5)
22 ADM(4)
23 VSS
24 ADM(3)
25 ADM(2)
26 ADM(1)
27 VDD18
28 ADM(0)
29 ALE
30 XWEH
31 XWEL
32 VDD18
33 XRE
34 XREADY
35 XRST ARM
36 VDD15
37 VSS
38 VCO AVDD25
39 VCO AVDD25
40 FSLPFI
41 VCO AVSS
42 VCO AVSS
43 PLL AVDD25
44 PLL AVDD25
45 PLL AVSS
46 PLL AVSS
47 VSS
48 FCK45
49 CAM HD
50 CAM VD
51 ADIN(9)
52 ADIN(8)
53 VDD18 30
54 ADIN(7)
55 ADIN(6)
56 ADIN(5)
57 ADIN(4)
58 ADIN(3)
59 ADIN(2)
60 ADIN(1)
61 ADIN(0)
62 VDD18 30
63 FCA
64 FCB
65 F2C
66 ZACOMP
67 VSS
68 VDD15
69 ZBCOMP
70 ZCCOMP
71 ZDCOMP
72 SIG
73 ALC PWM
74 VDD18 30
75 IRIS CLOSE
76 IRIS OPEN
77 HOST REQ
78 HOST ACK
79 VDD18 30
80 DUO INT3
81 VSS
82 DUO INT2
83 DUO INT1
84 DUO INT0
85 VSS
86 VDD15
87 VSS
88 VSS
89 VDD18 30
90 VDD18 30
91 SD VDD15
92 SD VSS
93 SD VSS
94 SD VDD25
95 VDD18
96 SCLK541
97 VDD18
98 CLKSEL2
99 CLK27B
100 CLKSEL0
101 CLK27A
102 CLKSEL1
103 CLK135
104 SD VDD25
105 SD VSS
106 SD VDD15
107 VSS
108 VDD15
109 TESTMD(0)
110 TESTMD(1)
111 TESTMD(2)
112 SD VDD15
113 SD VSS
114 SD VDD25
115 TESTMD(3)
116 TESTMD(4)
117 TESTMD(5)
118 VSS
119 VDD18
120 NC
121 VDD18
122 S400
123 BIAS2K
124 VSS
125 CLK241
126 VDD25
127 NC
128 NC
129 CLK240
130 SD VDD25
131 SD VSS
132 SD VDD15
133 VDD15
134 1394 AVSS
135 1394 AVDD15
136 1394 AVSS
137 R(1)
138 NC
139 R(0)
140 1394 AVDD30
141 NC
142 1394 AVSS
143 1394 AVSS
144 TPBN
145 NC
146 NC
147 TPBP
148 NC
149 TPAN
150 TPAP
151 TPBIAS
152 1394 AVDD30
153 1394 AVDD15
154 VDD15
155 XRST
156 ESP
157 VDD18
158 HID
159 VDD18
160 DBR3
161 DBR2
162 DBR1
163 DBR0
164 VSS
165 ACKR
166 REQR
167 ADDA(3)
168 ADDA(2)
169 VSS
170 ADDA(1)
171 VDD15
172 ADDA(0)
173 VAL
174 REACH
175 NTSEG
176 VDD18
279 SD VDD32
280 VDD15
281 CLK48O
282 CLK48I
283 NC
284 NC
285 NC
286 VDD25
287 VSS
288 NC
289 NC
290 NC
291 USB DP
292 USB DM
293 VSS
294 USB VDD32
295 USB VDD32
296 VDD30
297 CAM LENS DTO
298 CAM LENS CLK
299 CAM LENS CS
300 CAM C G AFE DTO
301 VDD30
302 CAM C G AFE CLK
303 CAM C G CS
304 CAM AFE CS
305 VSS
306 OSD VR
307 OSD VG
308 OSD VB
309 OSD BLK A
310 VSS
311 VDD15
312 OSD BLK B
313 FAD VDD15
314 FAD VSS
315 FAD VDD32
316 OSD HD
317 OSD VD
318 LCD VBLK
319 LCD HD
320 VSS
321 LCDPOL
322 VDD30
323 CLK45M ZB
324 AFDR VD
325 LINPWM
326 OSD CLK
327 FSLPHO
328 DTCLK
329 DVM
330 FAD VDD32
331 FAD VSS
332 FAD VDD15
333 VDD30
334 VDD18
335 TRACECLK
336 TRACESYNC
337 TRACEPKT(0)
338 TRACEPKT(1)
339 VDD18
340 VDD15
341 VSS
342 SD VDD15
343 SD VSS
344 SD VDD25
345 TRACEPKT(2)
346 TRACEPKT(3)
347 TRACEPKT(4)
348 TRACEPKT(5)
349 TRACEPKT(6)
350 TRACEPKT(7)
351 PIPESTAT(0)
352 PIPESTAT(1)
353 PIPESTAT(2)
354 A15
355 VSS
356 SD VDD25
357 SD VSS
358 SD VDD15
359 VSS
360 RTCK
361 XTRST
R3004
C3030 4.7
R3008 47K
C3067 15P
C3066 15P
R3046 1M
R3045 180
X3002 H0J480000002
RL3003
R3063 0
R3051 0
R3009 0
C3099 1
C3015 0.1
C3028 1
C3040 22P
X3001 H0J245500021
R3015 1M
R3014 330
C3039 22P
R3013 12K
R3004 10K
R3026 10K
C3044 220P
R3021 0
R3025 56
R3024 56
R3022 56
R3023 56
C3043 1
RL3031
RL3014
R3020 47K
R3002 47K
1 2 3 4 5 6 7 8 9 10 11 12 13
A B C D E F G H

NV-GS200GD,GS120GD MAIN (VIDEO) SCHEMATIC DIAGRAM

NOTE:MULTILAYER C.B.A.

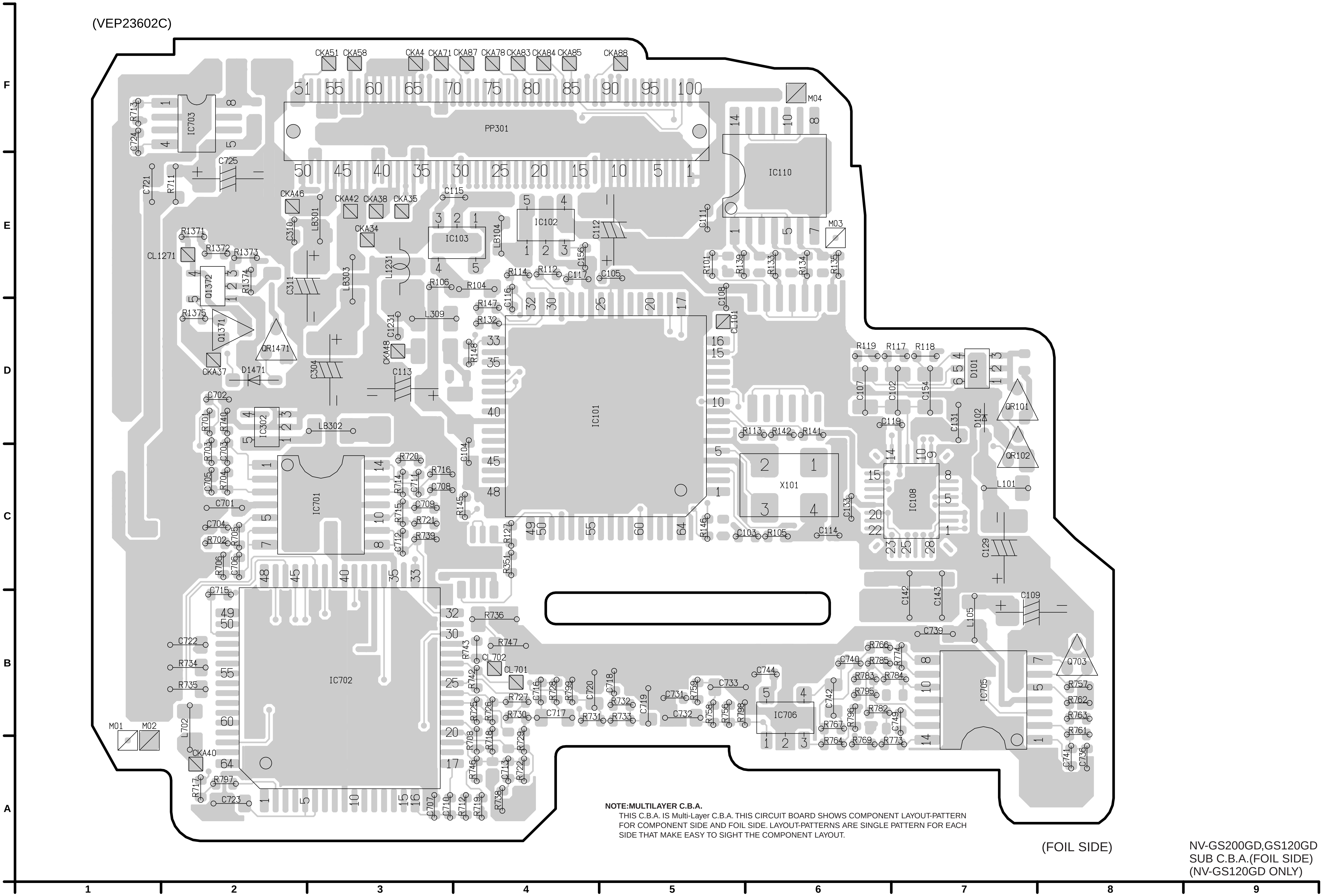
THIS C.B.A. IS Multi-Layer C.B.A. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT-PATTERNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.

(VEP23599A)


PP301
IC703
IC110
IC103
IC102
Q3401
Q3402
Q1372
Q1371
QR1471
D1471
IC3452
IC302
IC701
IC101
IC107
D101
D102
IC108
X101
IC301
IC702
IC706
IC705
Q703
L101
L105
L309
L701
L1227
L1231
LB301
LB302
LB303
LB104
M01
M02
M03
M04

(FOIL SIDE)

NV-GS200GD,GS120GD
SUB C.B.A. (FOIL SIDE)
(NV-GS200GD ONLY)


(VEP23602C)
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
CKA51
CKA58
CKA4
CKA71
CKA87
CKA78
CKA83
CKA84
CKA85
CKA88
PP301
M04
M03
M01
M02
IC703
R713
C724
C725
C721
R711
CKA46
C310
LB301
CKA42
CKA38
CKA35
CKA34
C115
IC103
LB104
IC102
C112
C111
IC110
R1371
R1372
R1373
CL1271
Q1372
R1374
R1375
Q1371
QR1471
CKA37
D1471
C311
LB303
L1231
R106
R104
R114
R112
C117
C105
C156
C116
R147
R132
L309
C1231
CKA48
C304
C113
R148
C108
C101
IC101
R101
R139
R133
R134
R135
R119
R117
R118
D101
C107
C102
C154
C131
D102
QR101
QR102
C119
R113
R142
R141
X101
IC108
L101
C133
C103
R105
C114
R146
C129
C702
R701
R740
IC302
LB302
R703
C703
C104
R720
R716
C705
R704
IC701
R714
C711
C708
C701
R145
C709
R715
R721
C704
R705
R702
C712
R739
R127
R706
C706
R351
C715
IC702
R736
C142
C143
C109
L105
C739
C722
R743
R747
R734
CL702
CL701
R735
R742
C716
R728
R799
C720
C718
R727
R725
R726
C731
R759
C733
C744
R766
C740
R785
R774
R783
R784
C742
R795
Q703
R757
R762
R763
R761
R730
C717
R731
R732
R733
C719
C732
R758
R756
R798
IC706
R796
R782
C749
IC705
R767
R764
R769
R773
C741
C736
L702
CKA40
R797
R717
C723
C707
C710
R712
R719
R738
R708
R718
R729
R746
C713
R722

NOTE:MULTILAYER C.B.A.

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(FOIL SIDE)

NV-GS200GD,GS120GD
SUB C.B.A.(FOIL SIDE)
(NV-GS120GD ONLY)

NOTE:MULTILAYER C.B.A.

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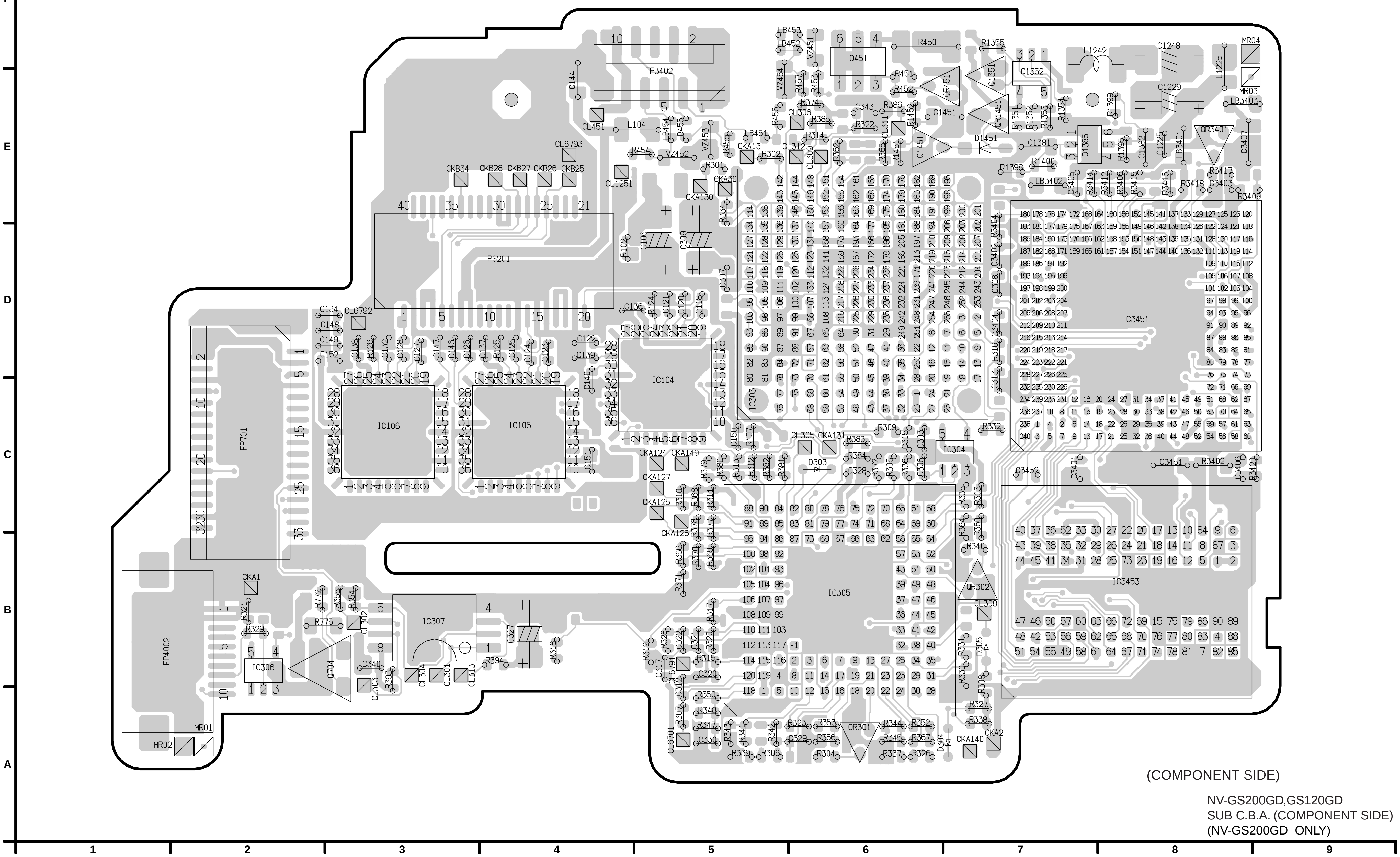
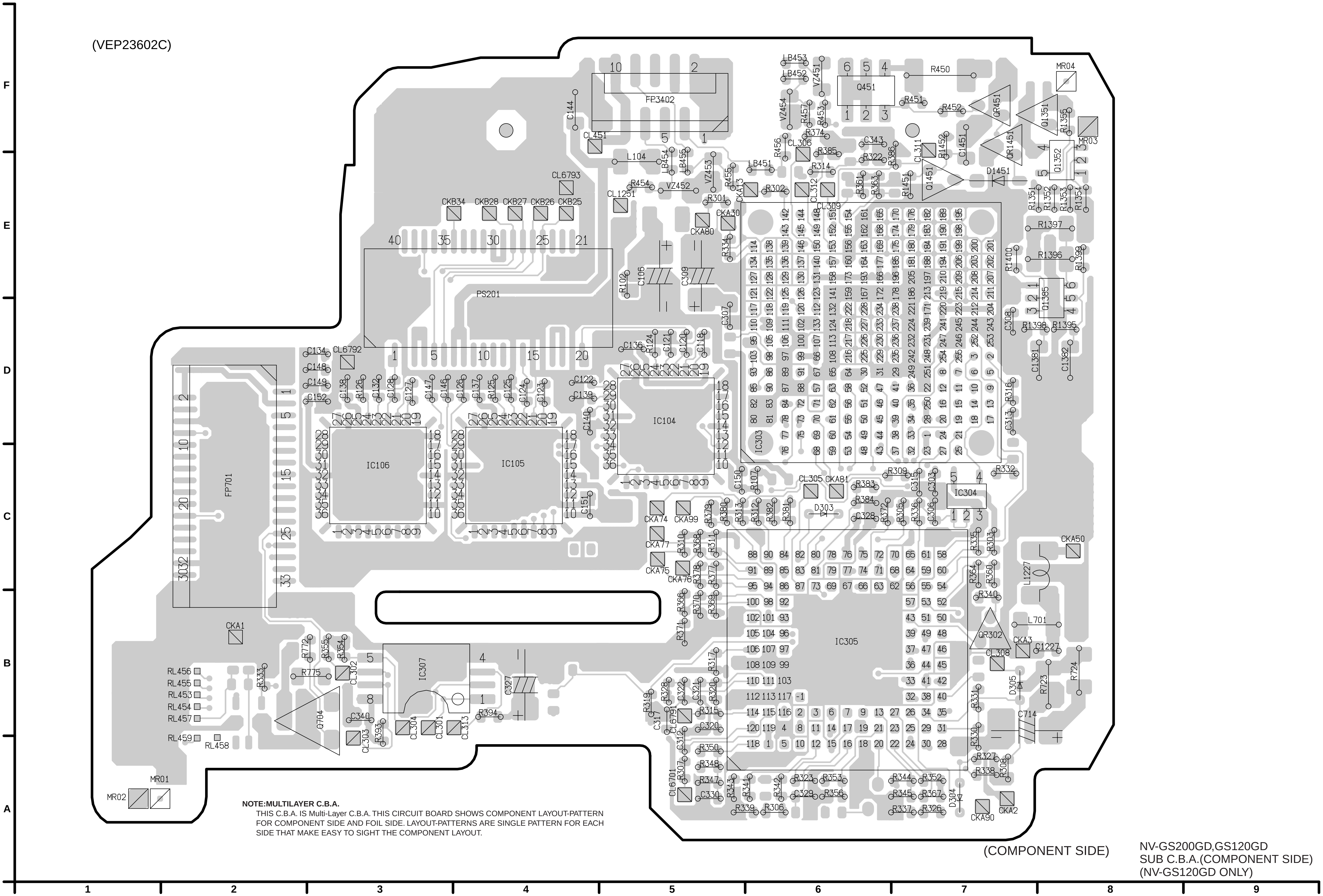
(VEP23599A)


F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
FP3402
PS201
FP701
FP4002
IC106
IC105
IC104
IC303
IC3451
IC3453
IC305
IC307
IC306
IC304
Q451
Q1352
Q1385
QR451
Q1351
QR1451
Q1451
QR3401
QR302
QR301
Q704
L1242
C1248
C1229
MR04
MR03
MR02
MR01
LB453
LB452
LB451
LB3403
LB3402
LB3401
D1451
D303
D304
D305
CKA1
CKA2
CKA13
CKA30
CKA124
CKA125
CKA126
CKA127
CKA130
CKA131
CKA140
CKA149
CKB25
CKB26
CKB27
CKB28
CKB34
CL451
CL1251
CL6792
CL6793
CL306
CL311
CL312
CL305
CL308
CL302
CL303
CL304
CL301
CL313
CL6701
CL6791

(COMPONENT SIDE)

NV-GS200GD,GS120GD
SUB C.B.A. (COMPONENT SIDE)
(NV-GS200GD ONLY)

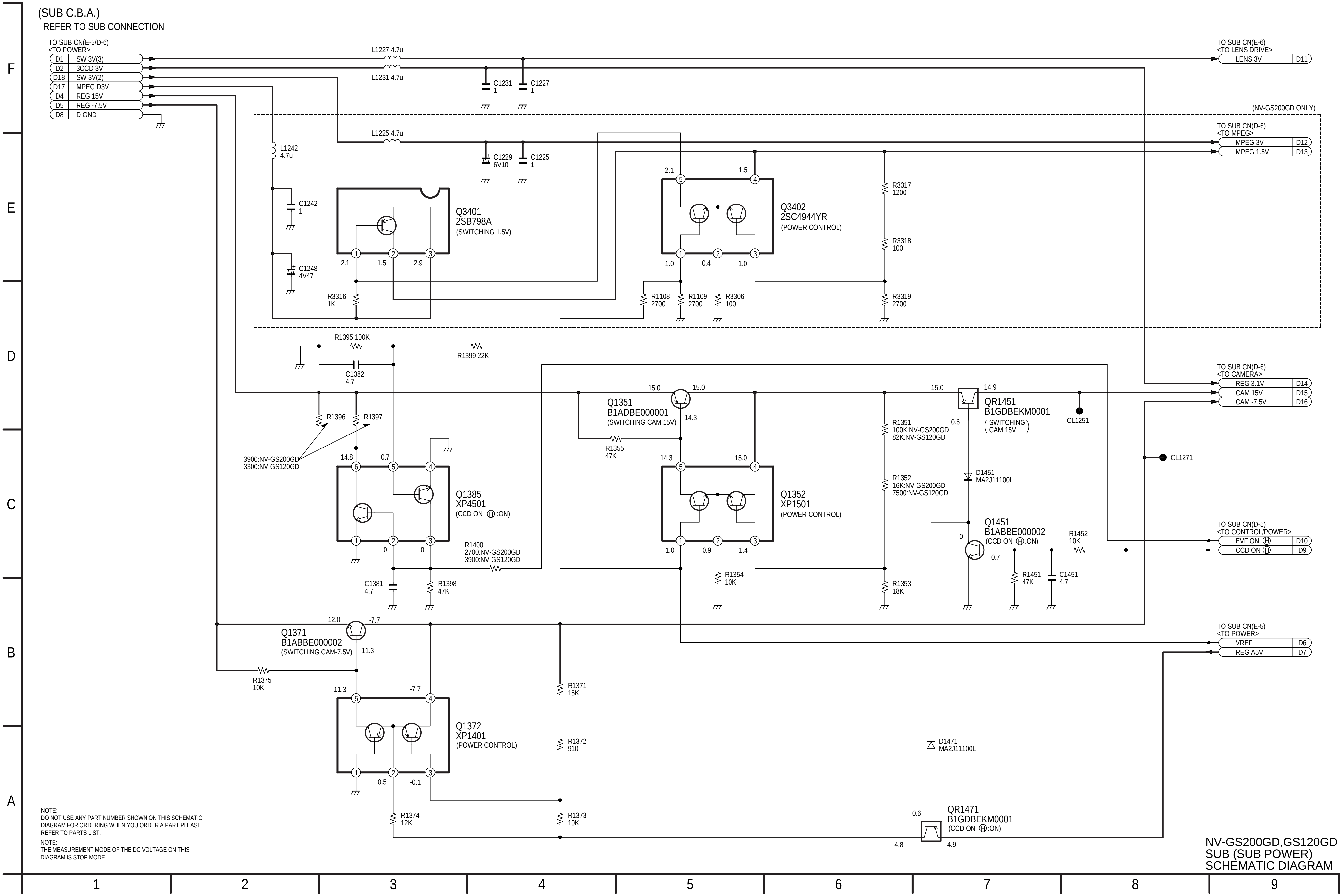
(VEP23602C)


F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
FP3402
Q451
R450
R451
R452
MR04
QR451
Q1351
R1355
MR03
QR1451
Q1352
D1451
Q1451
C144
CL451
L104
LB454
LB455
LB453
LB452
VZ451
VZ454
R457
R453
R374
R456
CL306
R385
C343
R322
R386
CL311
R1452
C1451
LB451
R314
CL6793
R454
VZ452
VZ453
R455
CKA13
R302
CL312
R301
CL309
CKA30
CKA80
CL1251
R361
R363
R1451
R1351
R1352
R1353
R1354
R1397
R1396
R1400
R1399
Q1385
R1398
R1395
C308
C1381
C1382
CKB34
CKB28
CKB27
CKB26
CKB25
PS201
R334
R102
C106
C309
C307
IC303
R316
C313
R332
C134
CL6792
C148
C149
C152
C138
R126
C132
C128
C127
C147
C146
C126
C137
R125
C125
C124
C123
C136
R124
C121
C120
C118
C122
C139
C140
IC104
IC106
IC105
FP701
C151
C150
R107
CL305
CKA81
R309
C310
C303
R383
R384
D303
C328
R372
R305
R336
C306
IC304
CKA74
CKA99
R379
R380
R313
R312
R382
R381
CKA77
R310
R368
R311
CKA75
CKA76
R378
R377
R370
R369
R366
R371
IC305
R335
R303
R364
R360
R340
CKA50
L1227
L701
QR302
CKA3
C1227
CL308
D305
R723
R724
R331
C714
R330
R327
R338
R308
D304
CKA90
CKA2
CKA1
R772
R355
R354
IC307
C327
RL456
RL455
RL453
RL454
RL457
RL459
RL458
R333
R775
CL302
Q704
C340
CL303
R393
CL304
CL301
CL313
R394
R319
R328
C322
C321
R320
R317
C317
CL6791
R315
C320
C312
R350
R307
R348
R347
CL6701
C330
R343
R341
R349
R323
R353
C329
R356
R339
R306
R344
R352
R345
R367
R337
R326
MR01
MR02

NOTE:MULTILAYER C.B.A.
THIS C.B.A. IS Multi-Layer C.B.A. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT-PATTERNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.

(COMPONENT SIDE)

NV-GS200GD,GS120GD
SUB C.B.A.(COMPONENT SIDE)
(NV-GS120GD ONLY)


(SUB C.B.A.)
REFER TO SUB CONNECTION
TO SUB CN(E-5/D-6)
<TO POWER>
D1 SW 3V(3)
D2 3CCD 3V
D18 SW 3V(2)
D17 MPEG D3V
D4 REG 15V
D5 REG -7.5V
D8 D GND
L1227 4.7u
L1231 4.7u
C1231 1
C1227 1
TO SUB CN(E-6)
<TO LENS DRIVE>
LENS 3V D11
(NV-GS200GD ONLY)
L1225 4.7u
C1229 6V10
C1225 1
TO SUB CN(D-6)
<TO MPEG>
MPEG 3V D12
MPEG 1.5V D13
L1242 4.7u
C1242 1
C1248 4V47
Q3401
2SB798A
(SWITCHING 1.5V)
2.1
1.5
2.9
R3316 1K
Q3402
2SC4944YR
(POWER CONTROL)
2.1
1.5
1.0
0.4
1.0
R1108 2700
R1109 2700
R3306 100
R3317 1200
R3318 100
R3319 2700
R1395 100K
R1399 22K
C1382 4.7
R1396
R1397
3900:NV-GS200GD
3300:NV-GS120GD
14.8
0.7
Q1385
XP4501
(CCD ON Ⓗ:ON)
0
0
R1400
2700:NV-GS200GD
3900:NV-GS120GD
C1381 4.7
R1398 47K
15.0
15.0
Q1351
B1ADBE000001
(SWITCHING CAM 15V)
14.3
R1355 47K
14.3
15.0
Q1352
XP1501
(POWER CONTROL)
1.0
0.9
1.4
R1354 10K
R1351
100K:NV-GS200GD
82K:NV-GS120GD
R1352
16K:NV-GS200GD
7500:NV-GS120GD
R1353 18K
15.0
14.9
QR1451
B1GDBEKM0001
(SWITCHING CAM 15V)
0.6
CL1251
D1451
MA2J11100L
CL1271
TO SUB CN(D-6)
<TO CAMERA>
REG 3.1V D14
CAM 15V D15
CAM -7.5V D16
Q1451
B1ABBE000002
(CCD ON Ⓗ:ON)
0
0.7
R1452 10K
R1451 47K
C1451 4.7
TO SUB CN(D-5)
<TO CONTROL/POWER>
EVF ON Ⓗ D10
CCD ON Ⓗ D9
-12.0
-7.7
Q1371
B1ABBE000002
(SWITCHING CAM-7.5V)
-11.3
R1375 10K
-11.3
-7.7
Q1372
XP1401
(POWER CONTROL)
0.5
-0.1
R1374 12K
R1371 15K
R1372 910
R1373 10K
TO SUB CN(E-5)
<TO POWER>
VREF D6
REG A5V D7
D1471
MA2J11100L
QR1471
B1GDBEKM0001
(CCD ON Ⓗ:ON)
0.6
4.8
4.9
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-GS200GD,GS120GD
SUB (SUB POWER)
SCHEMATIC DIAGRAM

Sub C.B.A.

Integrated Circuit		
IC101	D-5	F
IC102	E-5	F
IC103	E-5	F
IC104	C-5	C
IC105	C-4	C
IC106	C-3	C
IC107	D-7	F
IC108	C-7	F
IC110	E-7	F
IC301	C-5	F
IC302	C-3	F
IC303	D-6	C
IC304	C-7	C
IC305	B-6	C
IC306	B-2	C
IC307	B-3	C
IC701	C-4	F
IC702	B-4	F
IC703	E-2	F
IC705	B-8	F
IC706	B-7	F
IC3451	D-8	C
IC3452	D-2	F
IC3453	B-8	C

Transister		
Q451	F-6	C
Q703	B-8	F
Q704	B-2	C
Q1351	E-7	C
Q1352	E-7	C
Q1371	D-3	F
Q1372	D-3	F
Q1385	E-7	C
Q1451	E-6	C
Q3401	E-2	F
Q3402	E-2	F

Transister &Resister		
QR301	A-6	C
QR302	B-7	C
QR451	E-6	C
QR1451	E-7	C
QR1471	D-4	F
QR3401	E-8	C

Test Point		
CL101	D-6	F
CL301	B-3	C
CL302	B-3	C
CL303	B-3	C
CL304	B-3	C
CL305	C-6	C
CL306	E-6	C
CL308	B-7	C
CL309	E-6	C
CL311	E-6	C
CL312	E-6	C
CL313	B-3	C
CL451	E-4	C
CL701	B-5	F
CL702	B-5	F
CL1251	E-4	C
CL1271	E-3	F
CL3403	E-3	F
CL3404	D-3	F
CL3405	D-3	F
CL3406	E-3	F
CL3407	D-3	F
CL3408	D-3	F
CL3409	E-3	F
CL3410	D-2	F
CL3411	D-2	F
CL3412	D-3	F
CL3413	D-3	F
CL3414	E-2	F
CL3415	D-2	F
CL3416	D-2	F
CL3417	D-3	F
CL3418	D-2	F
CL3419	E-3	F
CL3420	D-3	F
CL3421	F-3	F
CL3422	E-2	F
CL3423	F-4	F
CL3424	F-3	F
CL3425	F-3	F
CL3426	D-2	F
CL3427	C-1	F
CL6701	A-5	C
CL6791	B-5	C
CL6792	D-3	C
CL6793	E-4	C

Connector		
FP701	C-2	C
FP3402	E-5	C
FP4002	B-2	C
PP301	E-4	F
PS201	D-4	C

Diode		
D101	D-8	F
D102	D-8	F
D303	C-6	C
D304	A-7	C
D305	B-7	C
D1451	E-7	C
D1471	D-3	F

Absorber		
VZ451	F-6	C
VZ452	E-5	C
VZ453	E-5	C
VZ454	E-5	C

Crystal Ocillator		
X101	C-7	F

Coil		
L101	C-8	F
L104	E-5	C
L105	B-8	F
L309	D-4	F
L701	B-2	F
L702	B-3	F
L1225	F-8	C
L1227	B-2	F
L1231	D-4	F
L1242	F-8	C
LB104	E-5	F
LB301	E-4	F
LB302	C-4	F
LB303	D-4	F
LB451	E-5	C
LB452	F-6	C
LB453	F-6	C
LB454	E-5	C
LB455	E-5	C
LB3401	E-8	C
LB3402	E-7	C
LB3403	E-8	C

Capacitor		
C101	E-6	F
C102	D-7	F
C103	C-6	F
C104	C-5	F
C105	D-6	F
C106	D-5	C
C107	D-7	F
C108	D-6	F
C109	B-8	F
C111	E-6	F
C113	D-4	F
C114	C-7	F
C115	E-5	F
C118	D-5	C
C119	C-7	F
C120	D-5	C
C121	D-5	C
C122	D-4	C
C123	D-4	C
C124	D-4	C
C125	D-4	C
C126	D-3	C
C127	D-3	C
C128	D-3	C
C129	C-8	F
C131	C-8	F
C132	D-3	C
C133	C-7	F
C134	D-3	C
C136	D-5	C
C137	D-4	C
C138	D-3	C
C139	D-4	C
C140	D-4	C
C142	B-7	F
C143	B-8	F
C144	E-4	C
C146	D-3	C
C147	D-3	C
C148	D-3	C
C149	D-3	C
C150	C-5	C
C151	C-4	C
C152	D-3	C
C154	D-8	F
C156	E-5	F
C303	C-6	C
C304	D-4	F
C306	C-6	C
C307	D-5	C
C308	D-7	C
C309	D-5	C
C310	E-4	F
C311	D-4	F
C312	B-5	C
C313	D-7	C
C314	C-5	F
C315	C-6	C
C317	B-5	C
C320	B-5	C
C321	B-5	C
C322	B-5	C
C327	B-4	C
C328	C-6	C
C329	A-6	C
C330	A-5	C
C340	B-3	C
C343	E-6	C
C701	C-3	F
C702	D-3	F
C703	C-3	F
C704	C-3	F
C705	C-3	F
C706	C-3	F
C707	A-4	F
C708	C-5	F
C709	C-4	F
C710	A-5	F
C711	C-4	F
C712	C-4	F
C713	A-5	F
C714	B-1	F
C715	B-3	F
C716	B-5	F
C717	B-5	F
C718	B-6	F
C719	B-6	F
C720	B-5	F
C721	C-2	F
C722	B-3	F
C723	A-3	F
C724	E-2	F
C725	C-2	F
C731	B-6	F
C732	B-6	F
C733	B-6	F
C736	A-9	F
C739	B-8	F
C740	B-7	F
C741	A-8	F
C742	B-7	F
C744	B-7	F
C749	B-7	F
C1225	E-8	C
C1227	B-2	F
C1229	E-8	C
C1231	D-4	F
C1242	E-1	F
C1248	F-8	C
C1381	E-7	C
C1382	E-8	C
C1451	E-7	C
C3401	C-7	C
C3402	D-7	C
C3403	E-8	C
C3404	D-7	C
C3405	E-7	C
C3406	C-8	C
C3407	E-9	C
C3451	C-8	C
C3452	C-7	C
C3453	C-1	F

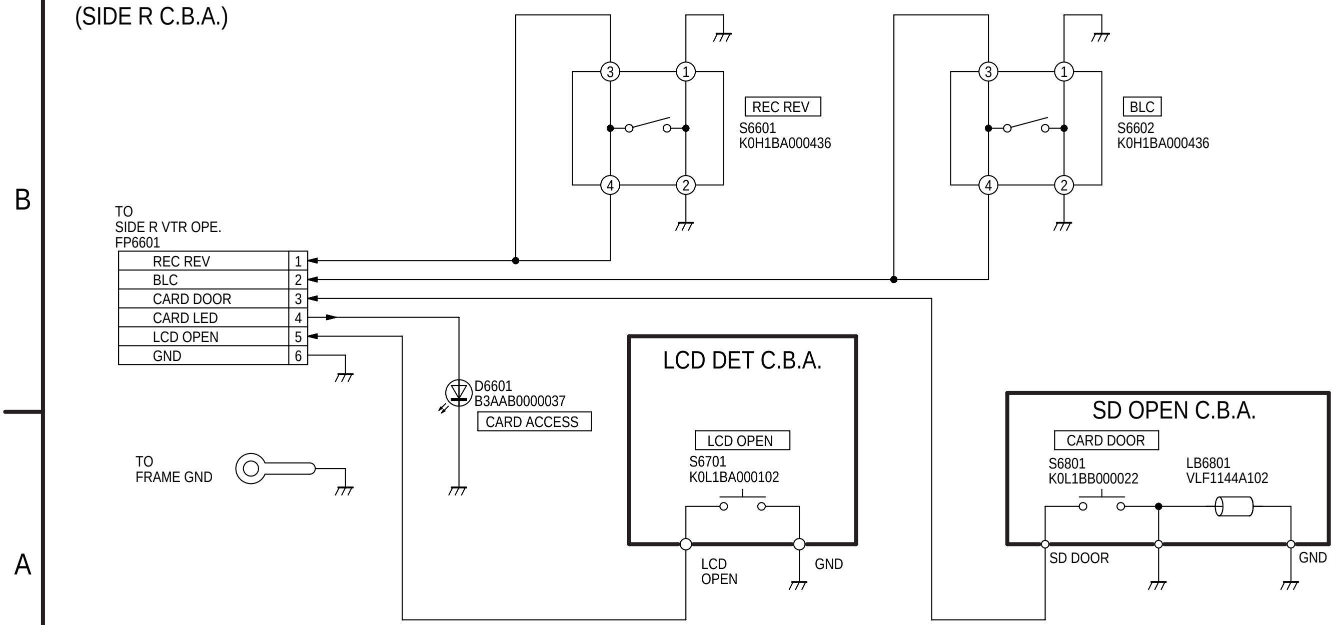
Resistor		
R102	D-4	C
R103	D-6	F
R104	D-5	F
R105	C-7	F
R106	D-4	F
R107	C-5	C
R112	D-5	F
R113	C-6	F
R114	D-5	F
R124	D-5	C
R125	D-4	C
R126	D-3	C
R127	C-5	F
R131	D-8	F
R132	D-5	F
R136	D-7	F
R137	D-7	F
R138	D-6	F
R139	D-6	F
R141	C-7	F
R142	C-7	F
R145	C-5	F
R146	C-6	F
R147	D-5	F
R148	D-5	F
R301	E-5	C
R302	E-5	C
R303	C-7	C
R304	A-6	C
R305	C-6	C
R306	A-5	C
R307	A-5	C
R308	B-7	C
R309	C-6	C
R310	C-5	C
R311	C-5	C
R312	C-5	C
R313	C-5	C
R314	E-6	C
R315	B-5	C
R316	D-7	C
R317	B-5	C
R318	B-4	C
R319	B-5	C
R320	B-5	C
R321	B-2	C
R322	E-6	C
R323	A-6	C
R326	A-6	C
R327	A-7	C
R328	B-5	C
R329	B-2	C
R330	B-7	C
R331	B-7	C
R332	C-7	C
R334	E-5	C
R335	C-7	C
R336	C-6	C
R337	A-6	C
R338	A-7	C
R339	A-5	C
R340	B-7	C
R341	A-5	C
R342	A-5	C
R343	A-5	C
R344	A-6	C
R345	A-6	C
R347	A-5	C
R348	A-5	C
R350	A-5	C
R352	A-6	C
R353	A-6	C
R354	B-3	C
R355	B-3	C
R356	A-6	C
R360	C-7	C
R362	E-6	C
R364	C-7	C
R365	E-6	C
R366	B-5	C
R367	A-6	C
R368	C-5	C
R369	B-5	C
R370	B-5	C
R371	B-5	C
R372	C-6	C
R374	E-6	C
R377	C-5	C
R378	C-5	C
R379	C-5	C
R380	C-5	C
R381	C-5	C
R382	C-5	C
R383	C-6	C
R384	C-6	C
R385	E-6	C
R386	E-6	C
R393	B-3	C
R394	B-4	C
R450	F-6	C
R451	E-6	C
R452	E-6	C
R453	E-6	C
R454	E-5	C
R455	E-5	C
R456	E-5	C
R457	E-6	C
R701	D-3	F
R702	C-3	F
R703	C-3	F
R704	C-3	F
R705	C-3	F
R706	C-3	F
R708	B-5	F
R711	C-2	F
R712	A-5	F
R713	E-2	F
R714	C-4	F
R715	C-4	F
R716	C-5	F
R717	A-3	F
R718	B-5	F
R719	A-5	F
R720	C-4	F
R721	C-4	F
R722	A-5	F
R723	B-2	F
R724	B-2	F
R725	B-5	F
R726	B-5	F
R727	B-5	F
R728	B-5	F
R729	B-5	F
R730	B-5	F
R731	B-5	F
R732	B-6	F
R733	B-6	F
R734	B-3	F
R735	B-3	F
R736	B-5	F
R738	A-5	F
R739	C-4	F
R740	D-3	F
R742	B-5	F
R743	B-5	F
R746	A-5	F
R747	B-5	F
R756	B-6	F
R757	B-8	F
R758	B-6	F
R759	B-6	F
R761	B-8	F
R762	B-8	F
R763	B-8	F
R764	A-7	F
R766	B-7	F
R767	B-7	F
R769	A-7	F
R772	B-2	C
R773	A-7	F
R774	B-7	F
R775	B-3	C
R782	B-7	F
R783	B-7	F
R784	B-7	F
R785	B-7	F
R795	B-7	F
R796	B-7	F
R797	A-3	F
R798	B-6	F
R799	B-5	F
R1108	E-2	F
R1109	E-2	F
R1351	E-7	C
R1352	E-7	C
R1353	E-7	C
R1354	E-7	C
R1355	F-7	C
R1371	E-3	F
R1372	E-3	F
R1373	E-3	F
R1374	D-3	F
R1375	D-3	F
R1395	E-8	C
R1396	E-2	F
R1397	E-1	F
R1398	E-7	C
R1399	E-8	C
R1400	E-7	C
R1451	E-6	C
R1452	E-6	C
R3306	E-2	F
R3316	E-2	F
R3317	D-2	F
R3318	D-2	F
R3319	D-2	F
R3402	C-8	C
R3403	C-2	F
R3404	E-7	C
R3406	E-8	C
R3409	E-9	C
R3412	E-8	C
R3414	E-7	C
R3415	E-8	C
R3416	E-8	C
R3417	E-8	C
R3418	E-8	C
R3420	C-9	C
R3421	D-2	F
R3422	C-1	F
R3423	E-3	F
R3425	E-3	F

ADDRESS INFORMATION C...COMPONENT SIDE F...FOIL SIDE

Sub C.B.A.

Integrated Circuit		
IC101	D-4	F
IC102	E-4	F
IC103	E-4	F
IC104	D-5	C
IC105	C-4	C
IC106	C-3	C
IC108	C-7	F
IC110	E-6	F
IC302	D-2	F
IC303	D-6	C
IC304	C-7	C
IC305	B-6	C
IC307	B-3	C
IC701	C-3	F
IC702	B-3	F
IC703	F-2	F
IC705	B-7	F
IC706	B-6	F
Transister		
Q451	F-6	C
Q703	B-8	F
Q704	B-2	C
Q1351	F-7	C
Q1352	E-8	C
Q1371	D-2	F
Q1372	E-2	F
Q1385	E-8	C
Q1451	E-7	C
Transister &Resister		
QR101	D-7	F
QR102	C-7	F
QR301	A-6	C
QR302	B-7	C
QR451	F-7	C
QR1451	F-7	C
QR1471	D-2	F
Test Point		
CL101	D-5	F
CL301	B-3	C
CL302	B-3	C
CL303	A-3	C
CL304	B-3	C
CL305	C-6	C
CL306	E-6	C
CL308	B-7	C
CL309	E-6	C
CL311	E-7	C
CL312	E-6	C
CL313	B-3	C
CL451	F-5	C
CL701	B-4	F
CL702	B-4	F
CL1251	E-5	C
CL1271	E-2	F
CL6701	A-5	C
CL6791	B-5	C
CL6792	D-3	C
CL6793	E-4	C
RL453	B-2	C
RL454	B-2	C
RL455	B-2	C
RL456	B-2	C
RL457	B-2	C
RL458	A-2	C
RL459	A-2	C
Connector		
FP701	C-2	C
FP3402	F-5	C
PP301	F-4	F
PS201	E-4	C
Diode		
D101	D-7	F
D102	D-7	F
D303	C-6	C
D304	A-7	C
D305	B-7	C
D1451	E-7	C
D1471	D-2	F
Absorber		
VZ451	F-6	C
VZ452	E-5	C
VZ453	E-5	C
VZ454	F-6	C
Crystal Ocillator		
X101	C-6	F
Coil		
L101	C-7	F
L104	E-5	C
L105	B-7	F
L309	D-3	F
L701	B-7	C
L702	B-2	F
L1227	C-8	C
L1231	E-3	F
LB104	E-4	F
LB301	E-3	F
LB302	D-3	F
LB303	E-3	F
LB451	E-6	C
LB452	F-6	C
LB453	F-6	C
LB454	E-5	C
LB455	E-5	C
Capacitor		
C102	D-7	F
C103	C-6	F
C104	C-4	F
C105	E-4	F
C106	E-5	C
C107	D-6	F
C109	B-8	F
C111	E-5	F
C112	E-5	F
C113	D-3	F
C114	C-6	F
C115	E-4	F
C116	D-4	F
C117	E-4	F
C118	D-5	C
C119	D-6	F
C120	D-5	C
C121	D-5	C
C122	D-4	C
C123	D-4	C
C124	D-4	C
C125	D-4	C
C126	D-4	C
C127	D-3	C
C128	D-3	C
C129	C-7	F
C131	D-7	F
C132	D-3	C
C133	C-6	F
C134	D-3	C
C136	D-5	C
C137	D-4	C
C138	D-3	C
C139	D-4	C
C140	D-4	C
C142	B-7	F
C143	B-7	F
C144	F-4	C
C146	D-3	C
C147	D-3	C
C148	D-3	C
C149	D-3	C
C150	C-5	C
C151	C-4	C
C152	D-3	C
C154	D-7	F
C156	E-4	F
C303	C-7	C
C304	D-3	F
C306	C-7	C
C307	D-5	C
C308	D-7	C
C309	E-5	C
C310	E-2	F
C311	E-2	F
C312	A-5	C
C313	D-7	C
C315	C-7	C
C317	B-5	C
C320	B-5	C
C321	B-5	C
C322	B-5	C
C327	B-4	C
C328	C-6	C
C329	A-6	C
C330	A-5	C
C340	B-3	C
C343	F-6	C
C701	C-2	F
C702	D-2	F
C703	C-2	F
C704	C-2	F
C705	C-2	F
C706	C-2	F
C707	A-3	F
C708	C-3	F
C709	C-3	F
C710	A-3	F
C711	C-3	F
C712	C-3	F
C713	A-4	F
C714	B-7	C
C715	C-2	F
C716	B-4	F
C717	B-4	F
C718	B-5	F
C719	B-5	F
C720	B-4	F
C721	E-1	F
C722	B-2	F
C723	A-2	F
C724	F-1	F
C725	E-2	F
C731	B-5	F
C732	B-5	F
C733	B-5	F
C736	A-8	F
C739	B-7	F
C740	B-6	F
C741	A-8	F
C742	B-6	F
C744	B-6	F
C749	B-7	F
C1227	B-8	C
C1231	D-3	F
C1381	D-8	C
C1382	D-8	C
C1451	F-7	C
Resistor		
R101	E-5	F
R102	E-5	C
R104	E-4	F
R105	C-6	F
R106	E-3	F
R107	C-6	C
R112	E-4	F
R113	D-6	F
R114	E-4	F
R117	D-7	F
R118	D-7	F
R119	D-6	F
R124	D-5	C
R125	D-4	C
R126	D-3	C
R127	C-4	F
R132	D-4	F
R133	E-6	F
R134	E-6	F
R135	E-6	F
R139	E-5	F
R141	D-6	F
R142	D-6	F
R145	C-4	F
R146	C-5	F
R147	D-4	F
R148	D-4	F
R301	E-5	C
R302	E-6	C
R303	C-7	C
R305	C-7	C
R306	A-6	C
R307	A-5	C
R308	A-7	C
R309	C-7	C
R310	C-5	C
R311	C-5	C
R312	C-6	C
R313	C-5	C
R314	E-6	C
R315	B-5	C
R316	D-7	C
R317	B-5	C
R319	B-5	C
R320	B-5	C
R322	E-6	C
R323	A-6	C
R326	A-7	C
R327	A-7	C
R328	B-5	C
R330	A-7	C
R331	B-7	C
R332	C-7	C
R333	B-2	C
R334	E-5	C
R335	C-7	C
R336	C-7	C
R337	A-7	C
R338	A-7	C
R339	A-6	C
R340	B-7	C
R341	A-6	C
R342	A-6	C
R343	A-5	C
R344	A-7	C
R345	A-7	C
R347	A-5	C
R348	A-5	C
R350	A-5	C
R351	C-4	F
R352	A-7	C
R353	A-6	C
R354	B-3	C
R355	B-3	C
R356	A-6	C
R360	C-7	C
R361	E-6	C
R363	E-6	C
R364	C-7	C
R366	B-5	C
R367	A-7	C
R368	C-5	C
R369	B-5	C
R370	B-5	C
R371	B-5	C
R372	C-6	C
R374	F-6	C
R377	C-5	C
R378	C-5	C
R379	C-5	C
R380	C-5	C
R381	C-6	C
R382	C-6	C
R383	C-6	C
R384	C-6	C
R385	E-6	C
R386	E-6	C
R393	B-3	C
R394	B-4	C
R450	F-7	C
R451	F-7	C
R452	F-7	C
R453	F-6	C
R454	E-5	C
R455	E-5	C
R456	F-6	C
R457	F-6	C
R701	D-2	F
R702	C-2	F
R703	C-2	F
R704	C-2	F
R705	C-2	F
R706	C-2	F
R708	A-4	F
R711	E-2	F
R712	A-4	F
R713	F-1	F
R714	C-3	F
R715	C-3	F
R716	C-3	F
R717	A-2	F
R718	A-4	F
R719	A-4	F
R720	C-3	F
R721	C-3	F
R722	A-4	F
R723	B-8	C
R724	B-8	C
R725	B-4	F
R726	B-4	F
R727	B-4	F
R728	B-4	F
R729	A-4	F
R730	B-4	F
R731	B-4	F
R732	B-5	F
R733	B-5	F
R734	B-2	F
R735	B-2	F
R736	B-4	F
R738	A-4	F
R739	C-3	F
R740	D-2	F
R742	B-4	F
R743	B-4	F
R746	A-4	F
R747	B-4	F
R756	B-5	F
R757	B-8	F
R758	B-5	F
R759	B-5	F
R761	B-8	F
R762	B-8	F
R763	B-8	F
R764	A-6	F
R766	B-6	F
R767	B-6	F
R769	A-6	F
R772	B-2	C
R773	A-7	F
R774	B-7	F
R775	B-2	C
R782	B-6	F
R783	B-6	F
R784	B-7	F
R785	B-6	F
R795	B-6	F
R796	B-6	F
R797	A-2	F
R798	B-5	F
R799	B-4	F
R1351	E-8	C
R1352	E-8	C
R1353	E-8	C
R1354	E-8	C
R1355	F-8	C
R1371	E-2	F
R1372	E-2	F
R1373	E-2	F
R1374	E-2	F
R1375	D-2	F
R1395	D-8	C
R1396	E-8	C
R1397	E-8	C
R1398	D-7	C
R1399	E-8	C
R1400	E-7	C
R1451	E-7	C
R1452	F-7	C

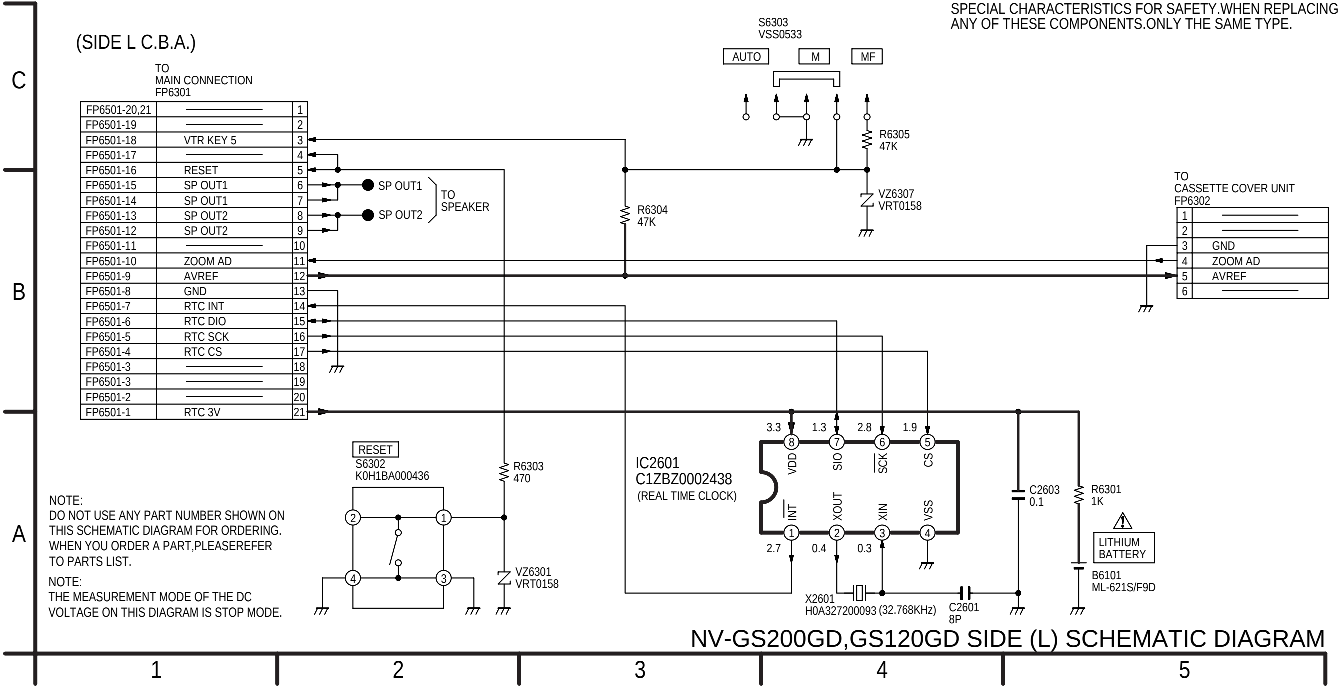
ADDRESS INFORMATION C...COMPONENT SIDE F...FOIL SIDE


(SIDE R C.B.A.)
B
A
TO
SIDE R VTR OPE.
FP6601
REC REV 1
BLC 2
CARD DOOR 3
CARD LED 4
LCD OPEN 5
GND 6
3
1
4
2
REC REV
S6601
K0H1BA000436
3
1
4
2
BLC
S6602
K0H1BA000436
D6601
B3AAB0000037
CARD ACCESS
TO
FRAME GND
LCD DET C.B.A.
LCD OPEN
S6701
K0L1BA000102
LCD
OPEN
GND
SD OPEN C.B.A.
CARD DOOR
S6801
K0L1BB000022
LB6801
VLF1144A102
SD DOOR
GND
1
2
3
4

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-GS200GD,GS120GD
SIDE (R)/R RELAY/LCD DET/ SD OPEN SCHEMATIC DIAGRAM

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.WHEN REPLACING ANY OF THESE COMPONENTS.ONLY THE SAME TYPE.

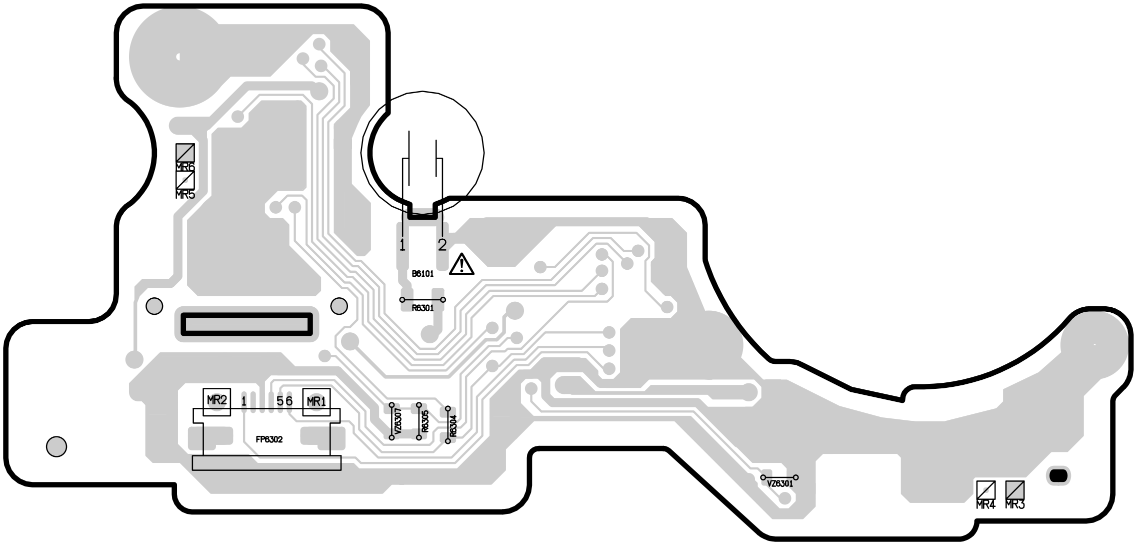

(SIDE L C.B.A.)
TO MAIN CONNECTION FP6301
FP6501-20,21 1
FP6501-19 2
FP6501-18 VTR KEY 5 3
FP6501-17 4
FP6501-16 RESET 5
FP6501-15 SP OUT1 6
FP6501-14 SP OUT1 7
FP6501-13 SP OUT2 8
FP6501-12 SP OUT2 9
FP6501-11 10
FP6501-10 ZOOM AD 11
FP6501-9 AVREF 12
FP6501-8 GND 13
FP6501-7 RTC INT 14
FP6501-6 RTC DIO 15
FP6501-5 RTC SCK 16
FP6501-4 RTC CS 17
FP6501-3 18
FP6501-3 19
FP6501-2 20
FP6501-1 RTC 3V 21
SP OUT1
SP OUT2
TO SPEAKER
S6303
VSS0533
AUTO
M
MF
R6305
47K
VZ6307
VRT0158
R6304
47K
TO CASSETTE COVER UNIT FP6302
1
2
3 GND
4 ZOOM AD
5 AVREF
6
RESET
S6302
K0H1BA000436
R6303
470
VZ6301
VRT0158
IC2601
C1ZBZ0002438
(REAL TIME CLOCK)
3.3
1.3
2.8
1.9
VDD
SIO
SCK
CS
INT
XOUT
XIN
VSS
2.7
0.4
0.3
X2601
H0A327200093 (32.768KHz)
C2601
8P
C2603
0.1
R6301
1K
⚠
LITHIUM BATTERY
B6101
ML-621S/F9D
C
B
A
1
2
3
4
5

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART,PLEASEREFER TO PARTS LIST.

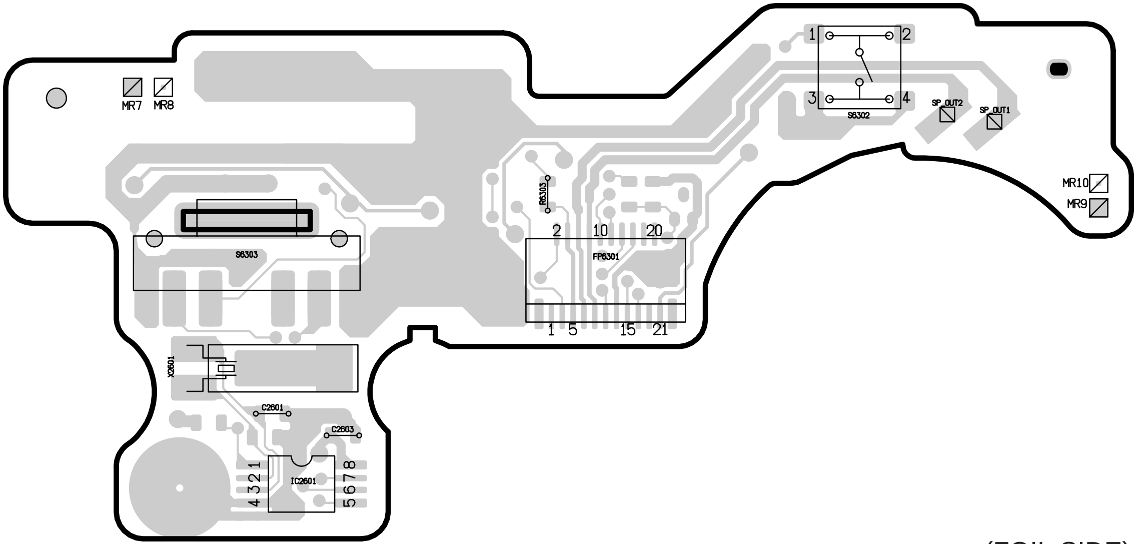
NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-GS200GD,GS120GD SIDE (L) SCHEMATIC DIAGRAM

(VEP001D4B)


E
D
C
MR6
MR5
B6101
1
2
R6301
MR2
1
56
MR1
FP6302
VZ6307
R6305
R6304
VZ6301
MR4
MR3

(COMPONENT SIDE)


B
A
MR7
MR8
S6303
1
2
3
4
S6302
SP_OUT2
SP_OUT1
MR10
MR9
R6303
2
10
20
FP6301
1
5
15
21
X2601
C2601
C2603
IC2601
4 3 2 1
5 6 7 8
1
2
3
4
5

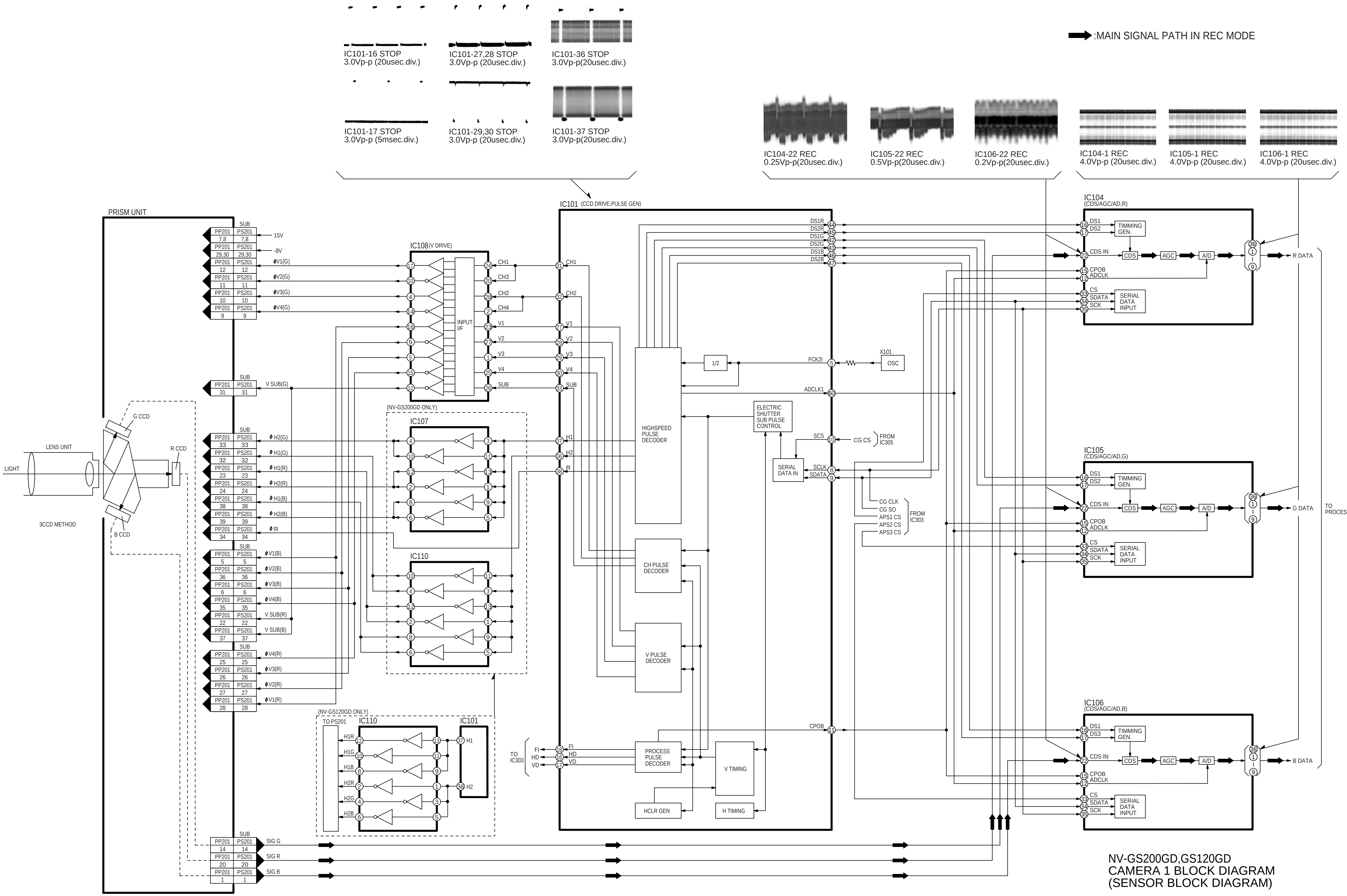
(FOIL SIDE)

IMPORTANT SAFETY NOTICE:

COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

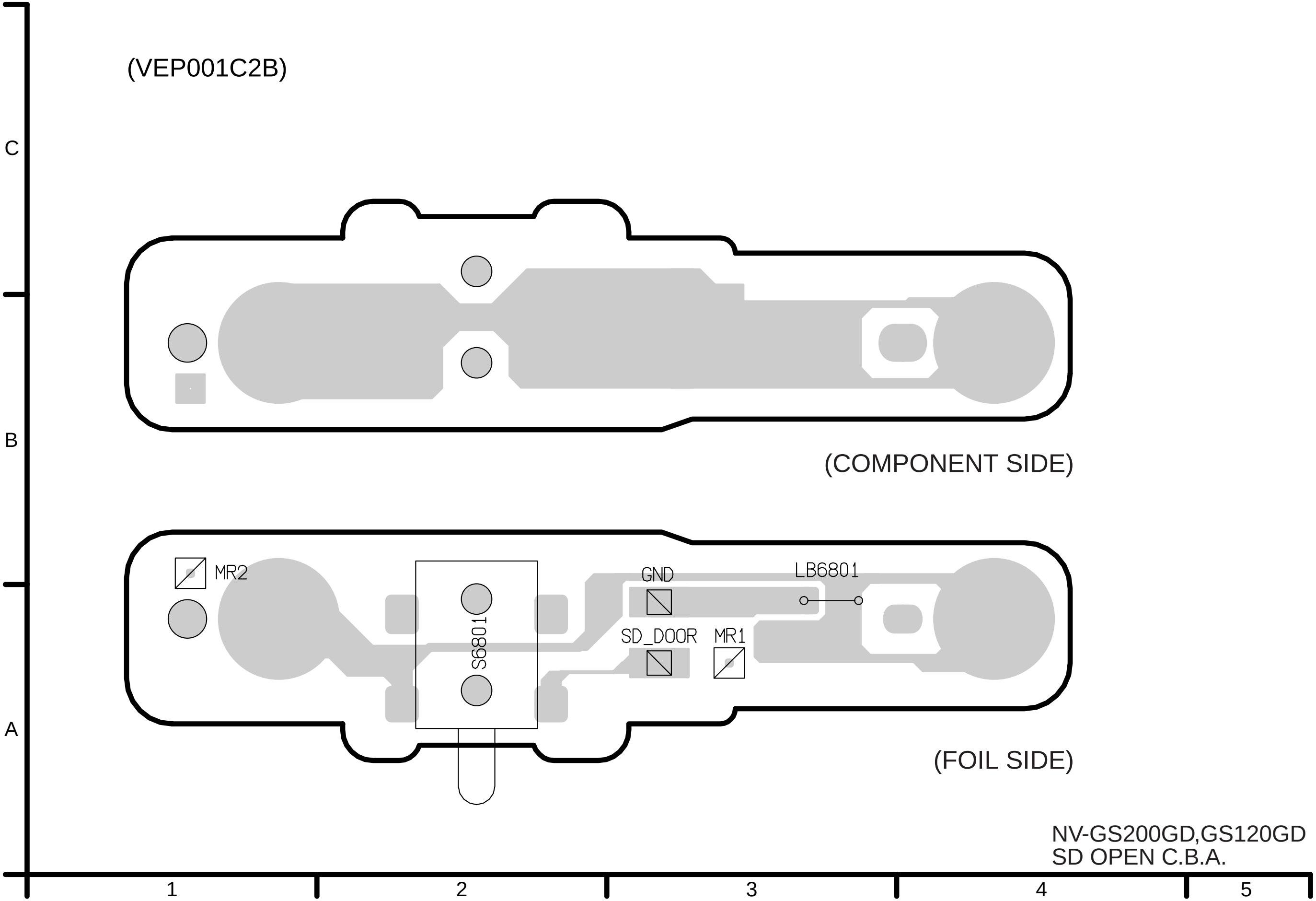
NV-GS200GD,GS120GD
SIDE (L) C.B.A.

➡ :MAIN SIGNAL PATH IN REC MODE


IC101-16 STOP
3.0Vp-p (20usec.div.)
IC101-27,28 STOP
3.0Vp-p (20usec.div.)
IC101-36 STOP
3.0Vp-p(20usec.div.)
IC101-17 STOP
3.0Vp-p (5msec.div.)
IC101-29,30 STOP
3.0Vp-p (20usec.div.)
IC101-37 STOP
3.0Vp-p(20usec.div.)
IC104-22 REC
0.25Vp-p(20usec.div.)
IC105-22 REC
0.5Vp-p(20usec.div.)
IC106-22 REC
0.2Vp-p(20usec.div.)
IC104-1 REC
4.0Vp-p (20usec.div.)
IC105-1 REC
4.0Vp-p (20usec.div.)
IC106-1 REC
4.0Vp-p (20usec.div.)
PRISM UNIT
LIGHT
LENS UNIT
G CCD
R CCD
B CCD
3CCD METHOD
SUB
PP201
PS201
15V
-8V
ϕV1(G)
ϕV2(G)
ϕV3(G)
ϕV4(G)
V SUB(G)
ϕH2(G)
ϕH1(G)
ϕH1(R)
ϕH2(R)
ϕH1(B)
ϕH2(B)
ϕR
ϕV1(B)
ϕV2(B)
ϕV3(B)
ϕV4(B)
V SUB(R)
V SUB(B)
ϕV4(R)
ϕV3(R)
ϕV2(R)
ϕV1(R)
SIG G
SIG R
SIG B
IC108(V DRIVE)
INPUT I/F
CH1
CH3
CH2
CH4
V1
V2
V3
V4
SUB
(NV-GS200GD ONLY)
IC107
IC110
(NV-GS120GD ONLY)
TO PS201
H1R
H1G
H1B
H2R
H2G
H2B
IC101
H1
H2
IC101 (CCD DRIVE,PULSE GEN)
H1
H2
R
DS1R
DS2R
DS1G
DS2G
DS1B
DS2B
FCK2I
X101
OSC
1/2
ADCLK1
HIGHSPEED PULSE DECODER
ELECTRIC SHUTTER SUB PULSE CONTROL
SCS
CG CS
FROM IC305
SERIAL DATA IN
SCLK
SDATA
CG CLK
CG SO
APS1 CS
APS2 CS
APS3 CS
FROM IC303
CH PULSE DECODER
V PULSE DECODER
CPOB
TO IC303
FI
HD
VD
PROCESS PULSE DECODER
V TIMING
HCLR GEN
H TIMING
IC104
(CDS/AGC/AD,R)
IC105
(CDS/AGC/AD,G)
IC106
(CDS/AGC/AD,B)
DS1
DS2
DS3
TIMING GEN.
CDS IN
CDS
AGC
A/D
CPOB
ADCLK
CS
SDATA
SCK
SERIAL DATA INPUT
R DATA
G DATA
B DATA
TO PROCESS

NV-GS200GD,GS120GD
CAMERA 1 BLOCK DIAGRAM
(SENSOR BLOCK DIAGRAM)

(VEP001C2B)

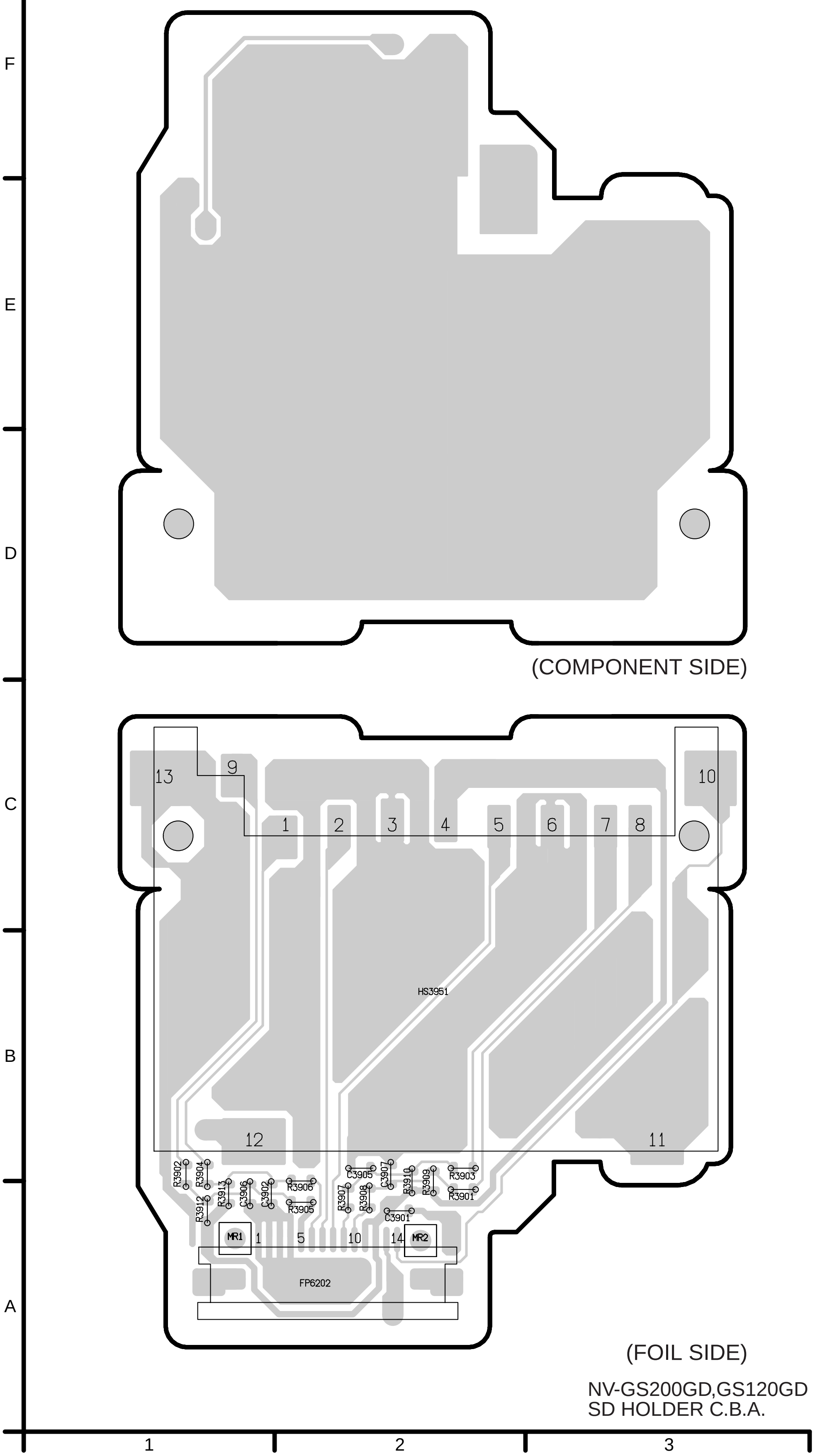

C
B
A
1
2
3
4
5
MR2
S6801
GND
LB6801
SD_DOOR
MR1

(COMPONENT SIDE)

(FOIL SIDE)

NV-GS200GD,GS120GD
SD OPEN C.B.A.

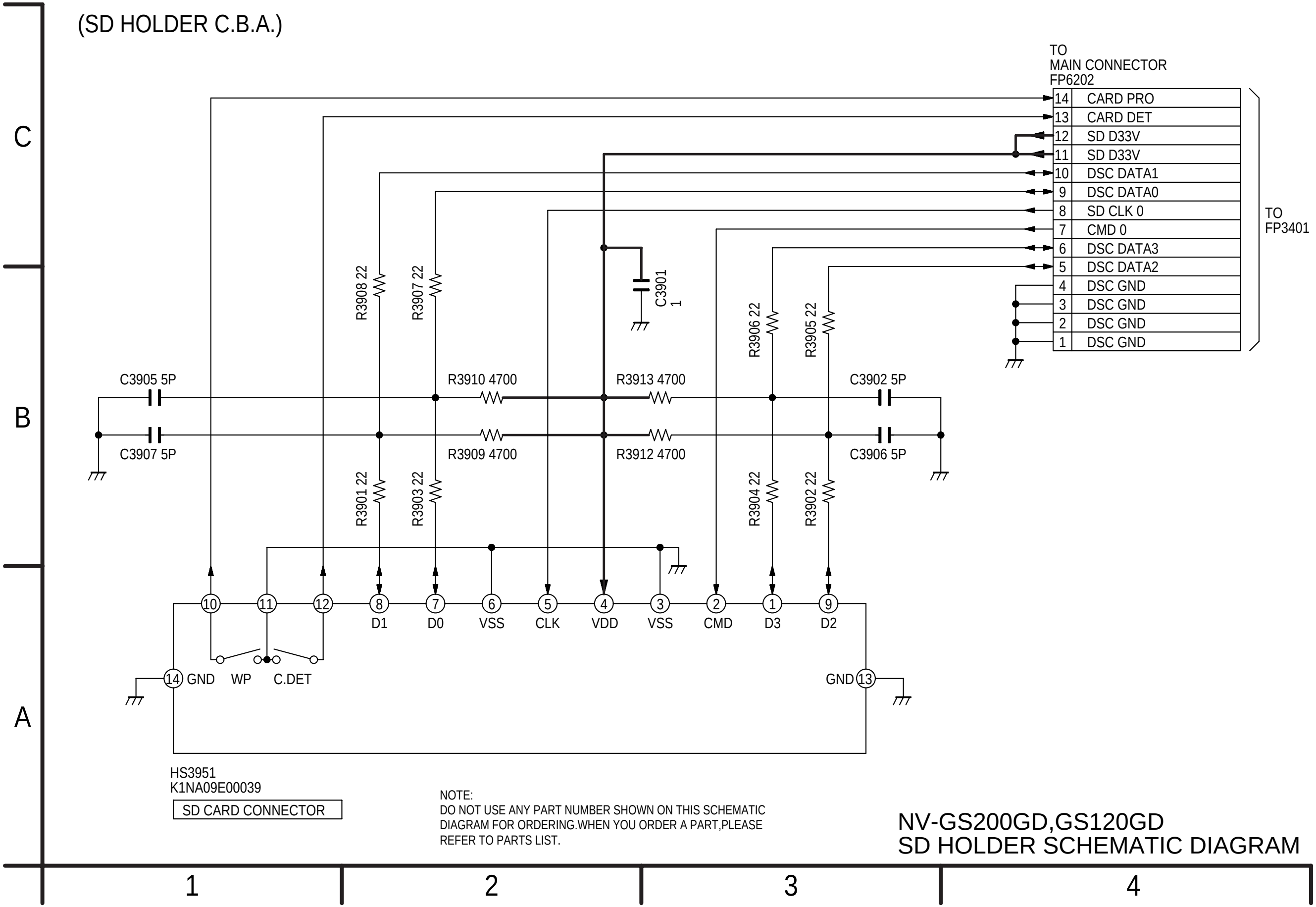
(VEP001D0A)


F
E
D
C
B
A
1
2
3
13
9
10
1
2
3
4
5
6
7
8
HS3951
12
11
R3902
R3904
R3913
C3906
C3902
R3906
R3905
R3912
R3907
R3908
C3905
C3907
R3910
R3909
R3903
R3901
C3901
MR1
1
5
10
14
MR2
FP6202

(COMPONENT SIDE)

(FOIL SIDE)

NV-GS200GD,GS120GD
SD HOLDER C.B.A.

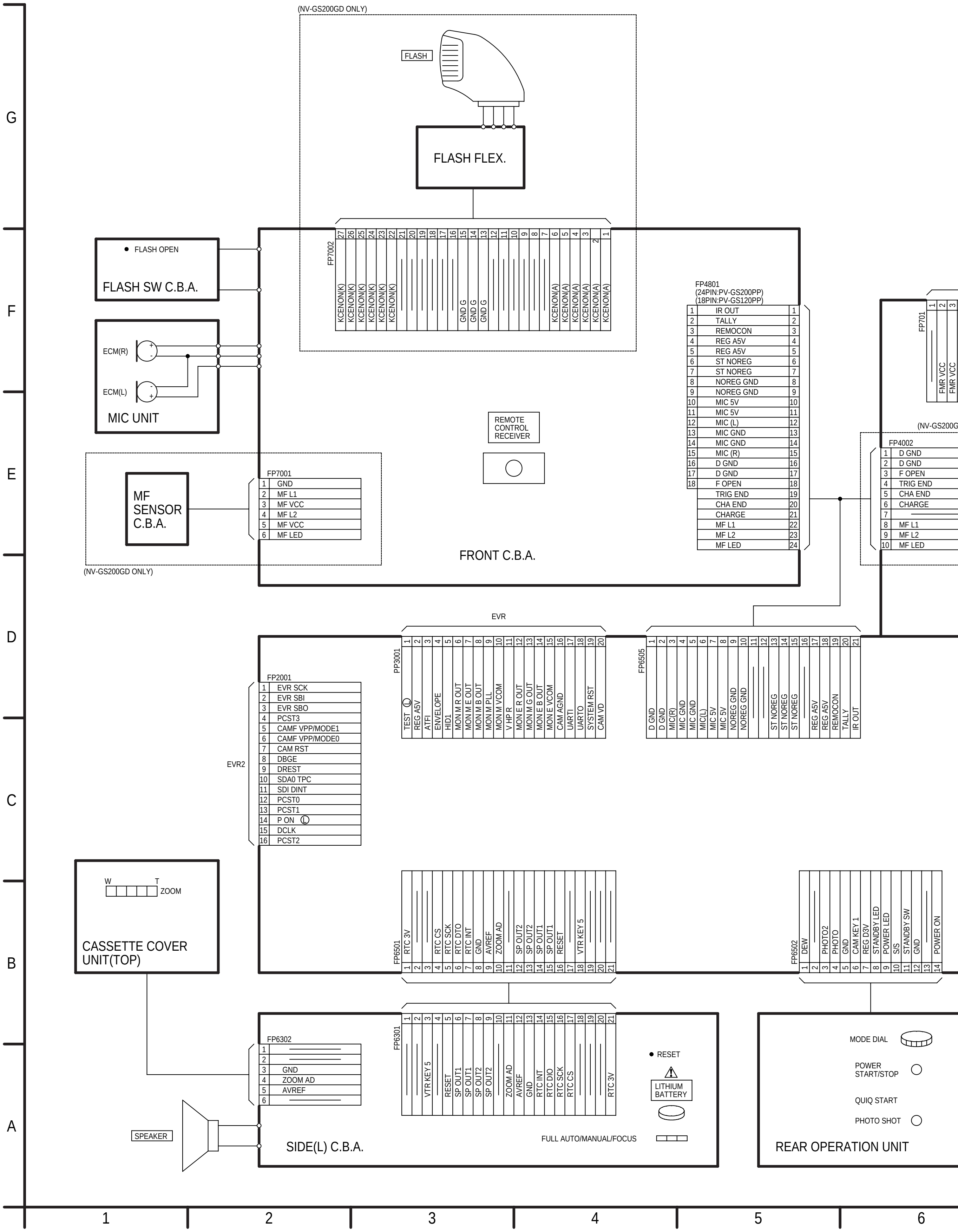

(SD HOLDER C.B.A.)
TO
MAIN CONNECTOR
FP6202
14 CARD PRO
13 CARD DET
12 SD D33V
11 SD D33V
10 DSC DATA1
9 DSC DATA0
8 SD CLK 0
7 CMD 0
6 DSC DATA3
5 DSC DATA2
4 DSC GND
3 DSC GND
2 DSC GND
1 DSC GND
TO
FP3401
R3908 22
R3907 22
C3901
1
R3906 22
R3905 22
C3905 5P
R3910 4700
R3913 4700
C3902 5P
C3907 5P
R3909 4700
R3912 4700
C3906 5P
R3901 22
R3903 22
R3904 22
R3902 22
10
11
12
8
D1
7
D0
6
VSS
5
CLK
4
VDD
3
VSS
2
CMD
1
D3
9
D2
14
GND
WP
C.DET
GND
13
HS3951
K1NA09E00039
SD CARD CONNECTOR
C
B
A
1
2
3
4

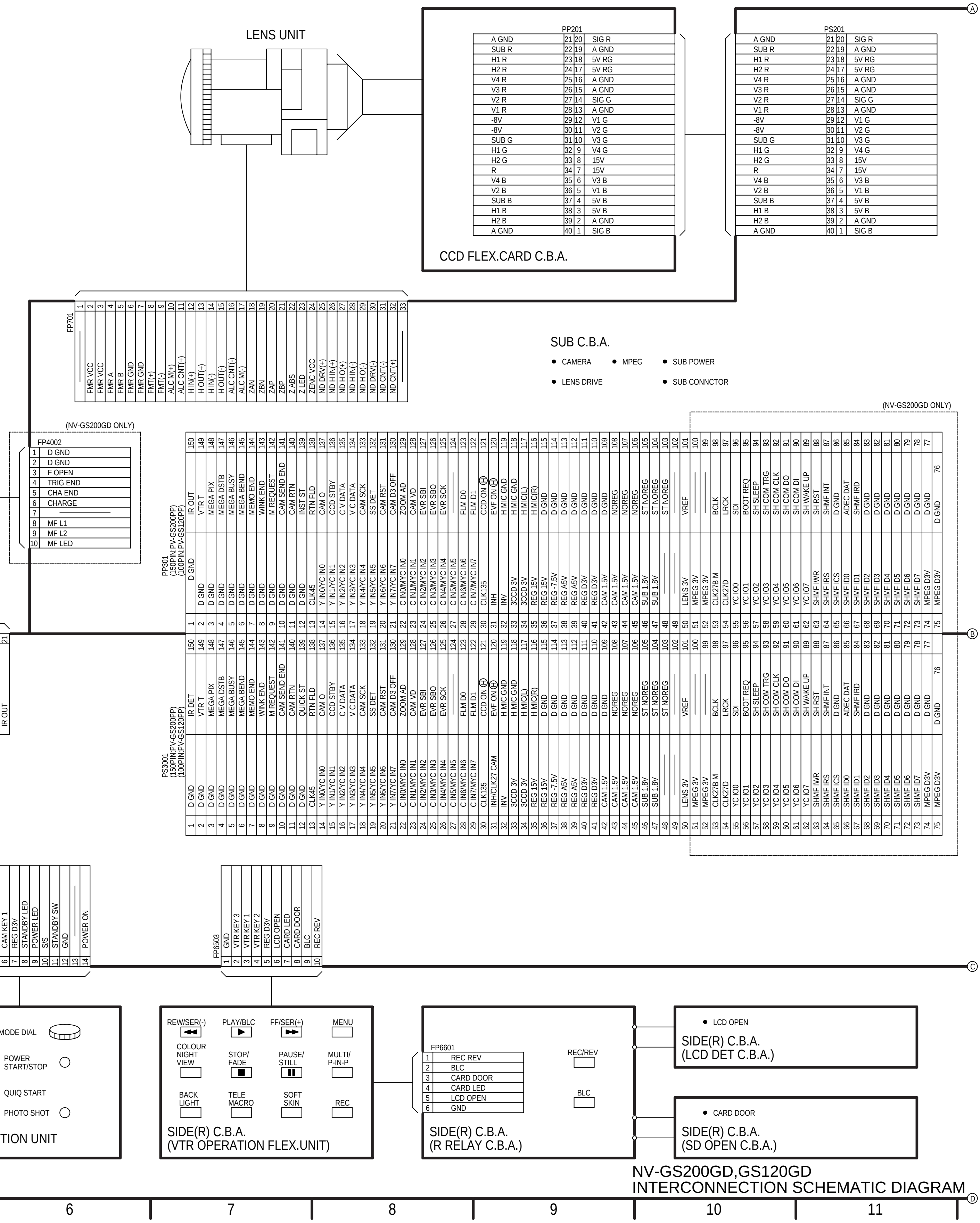
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-GS200GD,GS120GD
SD HOLDER SCHEMATIC DIAGRAM

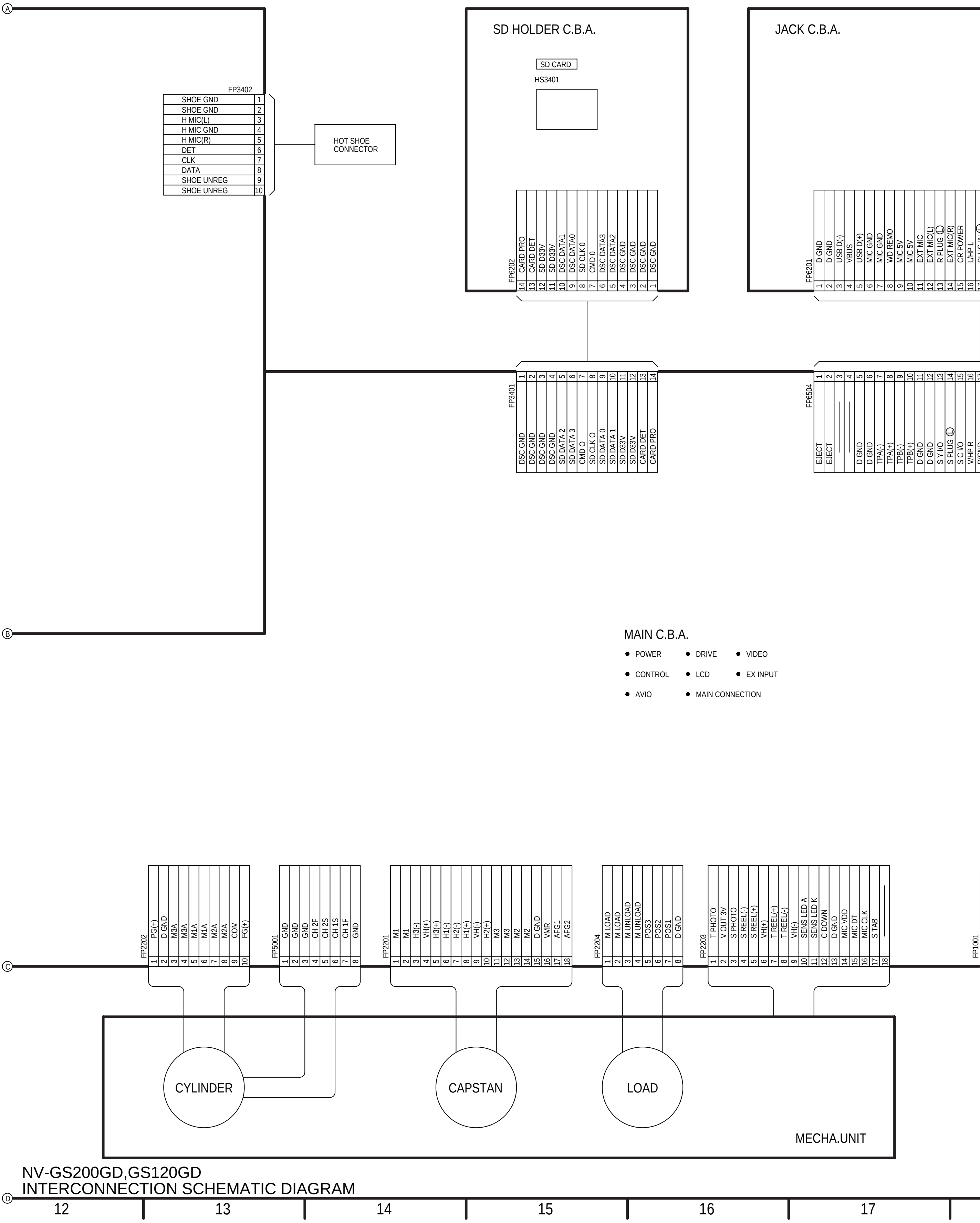
12 SCHEMATIC DIAGRAMS

12.1. INTERCONNECTION SCHEMATIC DIAGRAM

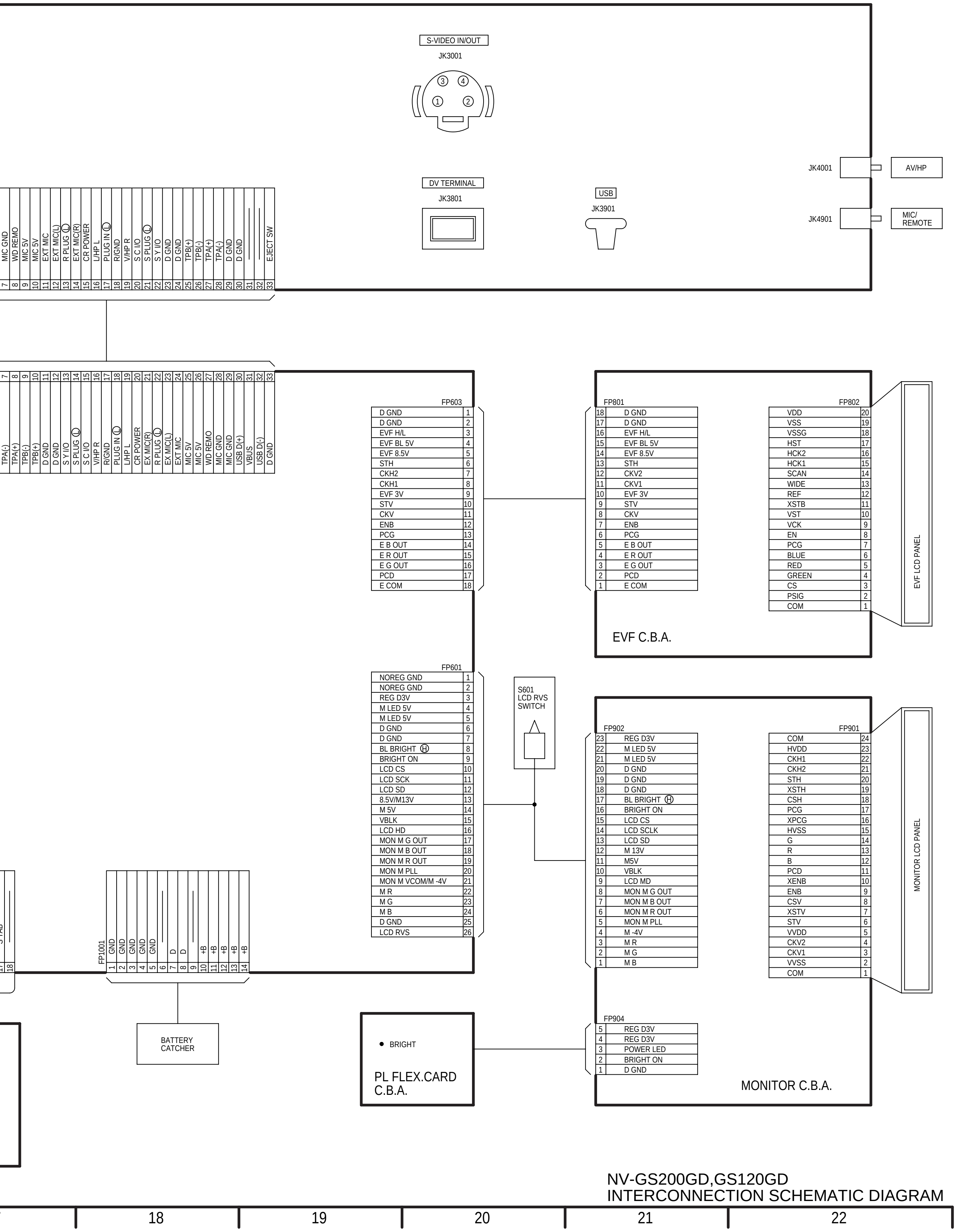

(NV-GS200GD ONLY)
FLASH
FLASH FLEX.
FP7002
KCENON(K)
GND G
KCENON(A)
FLASH OPEN
FLASH SW C.B.A.
ECM(R)
ECM(L)
MIC UNIT
FP4801
(24PIN:PV-GS200PP)
(18PIN:PV-GS120PP)
IR OUT
TALLY
REMOCON
REG A5V
ST NOREG
NOREG GND
MIC 5V
MIC (L)
MIC GND
MIC (R)
D GND
F OPEN
TRIG END
CHA END
CHARGE
MF L1
MF L2
MF LED
FP701
FMR VCC
(NV-GS200G
FP4002
REMOTE CONTROL RECEIVER
MF SENSOR C.B.A.
FP7001
GND
MF VCC
FRONT C.B.A.
(NV-GS200GD ONLY)
EVR
FP3001
TEST
ATFI
ENVELOPE
HID1
MON M R OUT
MON M E OUT
MON M B OUT
MON M PLL
MON M VCOM
V HP R
MON E R OUT
MON M G OUT
MON E B OUT
MON E VCOM
CAM AGND
UARTI
UARTO
SYSTEM RST
CAM VD
FP6505
MIC(R)
MIC(L)
FP2001
EVR SCK
EVR SBI
EVR SBO
PCST3
CAMF VPP/MODE1
CAMF VPP/MODE0
CAM RST
DBGE
DREST
SDA0 TPC
SDI DINT
PCST0
PCST1
P ON
DCLK
PCST2
EVR2
W
T
ZOOM
CASSETTE COVER UNIT(TOP)
FP6501
RTC 3V
RTC CS
RTC SCK
RTC DIO
RTC INT
AVREF
ZOOM AD
SP OUT2
SP OUT1
RESET
VTR KEY 5
FP6502
DEW
PHOTO2
PHOTO
CAM KEY 1
REG D3V
STANDBY LED
POWER LED
S/S
STANDBY SW
POWER ON
FP6302
FP6301
RESET
LITHIUM BATTERY
FULL AUTO/MANUAL/FOCUS
SPEAKER
SIDE(L) C.B.A.
MODE DIAL
POWER START/STOP
QUIQ START
PHOTO SHOT
REAR OPERATION UNIT
G
F
E
D
C
B
A
1
2
3
4
5
6


LENS UNIT
CCD FLEX.CARD C.B.A.
PP201
PS201
FP701
SUB C.B.A.
● CAMERA
● MPEG
● SUB POWER
● LENS DRIVE
● SUB CONNCTOR
(NV-GS200GD ONLY)
FP4002
PP301 (150PIN:PV-GS200PP) (100PIN:PV-GS120PP)
PS3001 (150PIN:PV-GS200PP) (100PIN:PV-GS120PP)
FP6503
MODE DIAL
POWER START/STOP
QUIQ START
PHOTO SHOT
TION UNIT
REW/SER(-)
PLAY/BLC
FF/SER(+)
MENU
COLOUR NIGHT VIEW
STOP/ FADE
PAUSE/ STILL
MULTI/ P-IN-P
BACK LIGHT
TELE MACRO
SOFT SKIN
REC
SIDE(R) C.B.A. (VTR OPERATION FLEX.UNIT)
FP6601
REC/REV
BLC
SIDE(R) C.B.A. (R RELAY C.B.A.)
● LCD OPEN
SIDE(R) C.B.A. (LCD DET C.B.A.)
● CARD DOOR
SIDE(R) C.B.A. (SD OPEN C.B.A.)
A
B
C
D
6
7
8
9
10
11

NV-GS200GD,GS120GD
INTERCONNECTION SCHEMATIC DIAGRAM


A
B
C
D
FP3402
SHOE GND
SHOE GND
H MIC(L)
H MIC GND
H MIC(R)
DET
CLK
DATA
SHOE UNREG
SHOE UNREG
HOT SHOE CONNECTOR
SD HOLDER C.B.A.
SD CARD
HS3401
FP6202
CARD PRO
CARD DET
SD D33V
SD D33V
DSC DATA1
DSC DATA0
SD CLK 0
CMD 0
DSC DATA3
DSC DATA2
DSC GND
DSC GND
DSC GND
DSC GND
FP3401
DSC GND
DSC GND
DSC GND
DSC GND
SD DATA 2
SD DATA 3
CMD O
SD CLK O
SD DATA 0
SD DATA 1
SD D33V
SD D33V
CARD DET
CARD PRO
JACK C.B.A.
FP6201
D GND
D GND
USB D(-)
VBUS
USB D(+)
MIC GND
MIC GND
WD REMO
MIC 5V
MIC 5V
EXT MIC
EXT MIC(L)
R PLUG Ⓛ
EXT MIC(R)
CR POWER
UHP L
FP6504
EJECT
EJECT
D GND
D GND
TPA(-)
TPA(+)
TPB(-)
TPB(+)
D GND
D GND
S Y I/O
S PLUG Ⓛ
S C I/O
VHP R
MAIN C.B.A.
● POWER
● DRIVE
● VIDEO
● CONTROL
● LCD
● EX INPUT
● AVIO
● MAIN CONNECTION
FP2202
PG(+)
D GND
M3A
M3A
M1A
M1A
M2A
M2A
COM
FG(+)
FP5001
GND
GND
GND
CH 2F
CH 2S
CH 1S
CH 1F
GND
FP2201
M1
M1
H3(-)
VH(+)
H3(+)
H1(-)
H2(-)
H1(+)
VH(-)
H2(+)
M3
M3
M2
M2
D GND
VMR
AFG1
AFG2
FP2204
M LOAD
M LOAD
M UNLOAD
M UNLOAD
POS3
POS2
POS1
D GND
FP2203
T PHOTO
V OUT 3V
S PHOTO
S REEL(-)
S REEL(+)
VH(+)
T REEL(+)
T REEL(-)
VH(-)
SENS LED A
SENS LED K
C DOWN
D GND
MIC VDD
MIC DT
MIC CLK
S TAB
FP1001
CYLINDER
CAPSTAN
LOAD
MECHA.UNIT
12
13
14
15
16
17

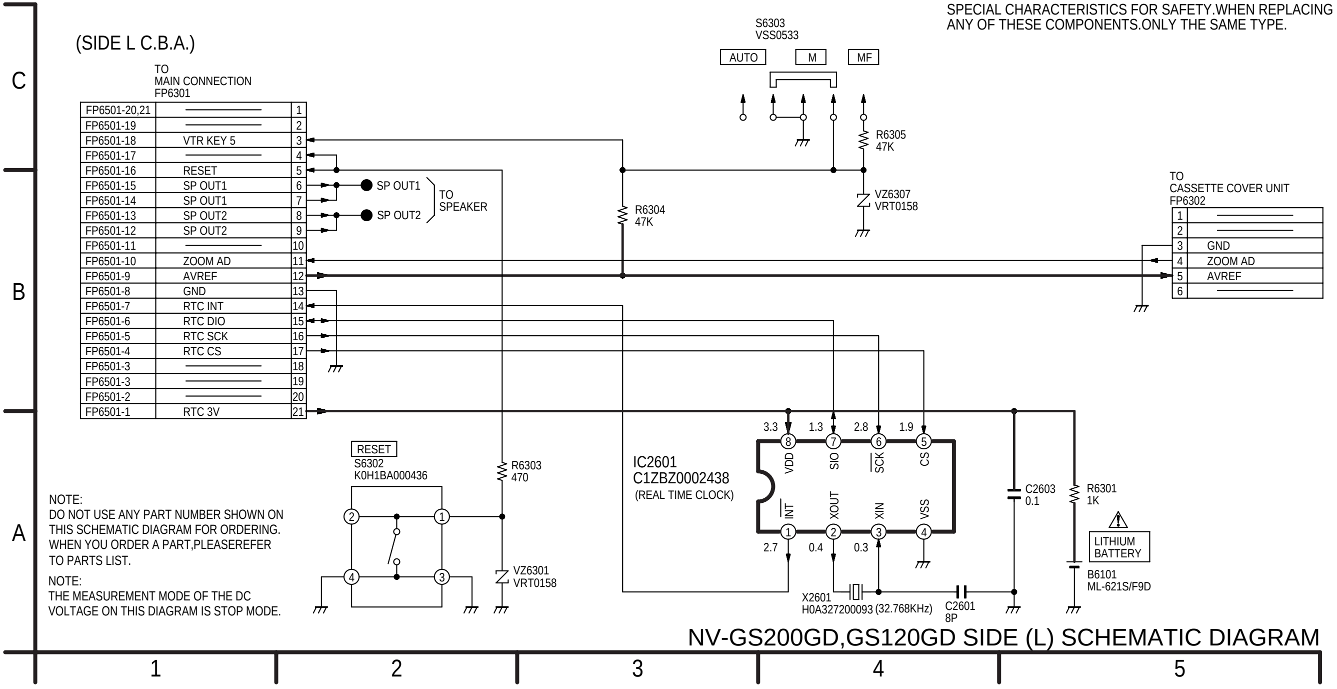
NV-GS200GD,GS120GD
INTERCONNECTION SCHEMATIC DIAGRAM


S-VIDEO IN/OUT
JK3001
3
4
1
2
DV TERMINAL
JK3801
USB
JK3901
JK4001
AV/HP
JK4901
MIC/
REMOTE
7 MIC GND
8 WD REMO
9 MIC 5V
10 MIC 5V
11 EXT MIC
12 EXT MIC(L)
13 R PLUG Ⓛ
14 EXT MIC(R)
15 CR POWER
16 L/HP L
17 PLUG IN Ⓛ
18 R/GND
19 V/HP R
20 S C I/O
21 S PLUG Ⓛ
22 S Y I/O
23 D GND
24 D GND
25 TPB(+)
26 TPB(-)
27 TPA(+)
28 TPA(-)
29 D GND
30 D GND
31
32
33 EJECT SW
7 TPA(-)
8 TPA(+)
9 TPB(-)
10 TPB(+)
11 D GND
12 D GND
13 S Y I/O
14 S PLUG Ⓛ
15 S C I/O
16 V/HP R
17 R/GND
18 PLUG IN Ⓛ
19 L/HP L
20 CR POWER
21 EX MIC(R)
22 R PLUG Ⓛ
23 EX MIC(L)
24 EXT MIC
25 MIC 5V
26 MIC 5V
27 WD REMO
28 MIC GND
29 MIC GND
30 USB D(+)
31 VBUS
32 USB D(-)
33 D GND
FP603
D GND 1
D GND 2
EVF H/L 3
EVF BL 5V 4
EVF 8.5V 5
STH 6
CKH2 7
CKH1 8
EVF 3V 9
STV 10
CKV 11
ENB 12
PCG 13
E B OUT 14
E R OUT 15
E G OUT 16
PCD 17
E COM 18
FP801
18 D GND
17 D GND
16 EVF H/L
15 EVF BL 5V
14 EVF 8.5V
13 STH
12 CKV2
11 CKV1
10 EVF 3V
9 STV
8 CKV
7 ENB
6 PCG
5 E B OUT
4 E R OUT
3 E G OUT
2 PCD
1 E COM
FP802
VDD 20
VSS 19
VSSG 18
HST 17
HCK2 16
HCK1 15
SCAN 14
WIDE 13
REF 12
XSTB 11
VST 10
VCK 9
EN 8
PCG 7
BLUE 6
RED 5
GREEN 4
CS 3
PSIG 2
COM 1
EVF LCD PANEL
EVF C.B.A.
FP601
NOREG GND 1
NOREG GND 2
REG D3V 3
M LED 5V 4
M LED 5V 5
D GND 6
D GND 7
BL BRIGHT Ⓗ 8
BRIGHT ON 9
LCD CS 10
LCD SCK 11
LCD SD 12
8.5V/M13V 13
M 5V 14
VBLK 15
LCD HD 16
MON M G OUT 17
MON M B OUT 18
MON M R OUT 19
MON M PLL 20
MON M VCOM/M -4V 21
M R 22
M G 23
M B 24
D GND 25
LCD RVS 26
S601
LCD RVS
SWITCH
FP902
23 REG D3V
22 M LED 5V
21 M LED 5V
20 D GND
19 D GND
18 D GND
17 BL BRIGHT Ⓗ
16 BRIGHT ON
15 LCD CS
14 LCD SCLK
13 LCD SD
12 M 13V
11 M5V
10 VBLK
9 LCD MD
8 MON M G OUT
7 MON M B OUT
6 MON M R OUT
5 MON M PLL
4 M -4V
3 M R
2 M G
1 M B
FP901
COM 24
HVDD 23
CKH1 22
CKH2 21
STH 20
XSTH 19
CSH 18
PCG 17
XPCG 16
HVSS 15
G 14
R 13
B 12
PCD 11
XENB 10
ENB 9
CSV 8
XSTV 7
STV 6
VVDD 5
CKV2 4
CKV1 3
VVSS 2
COM 1
MONITOR LCD PANEL
S TAB
17
18
FP1001
1 GND
2 GND
3 GND
4 GND
5 GND
6
7 D
8 D
9
10 +B
11 +B
12 +B
13 +B
14 +B
BATTERY
CATCHER
BRIGHT
PL FLEX.CARD
C.B.A.
FP904
5 REG D3V
4 REG D3V
3 POWER LED
2 BRIGHT ON
1 D GND
MONITOR C.B.A.
18
19
20
21
22

NV-GS200GD,GS120GD
INTERCONNECTION SCHEMATIC DIAGRAM

12.2. SIDE (L) SCHEMATIC DIAGRAM

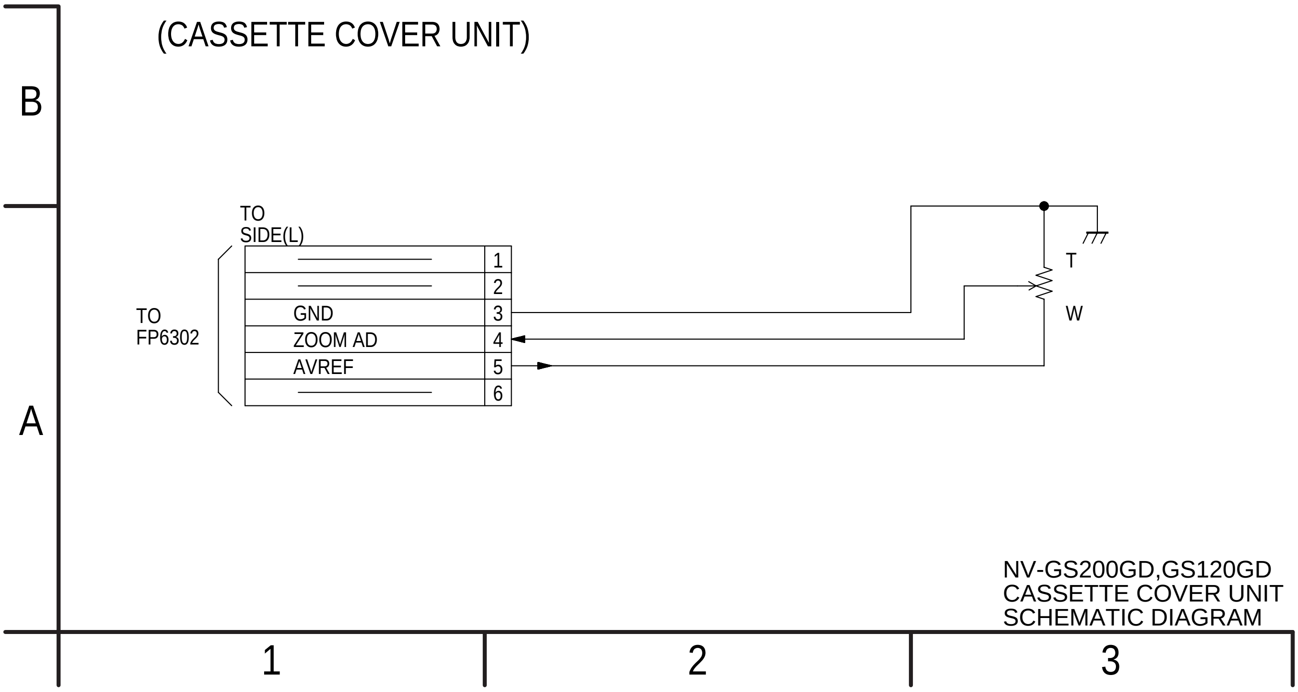
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.WHEN REPLACING ANY OF THESE COMPONENTS.ONLY THE SAME TYPE.


(SIDE L C.B.A.)
TO
MAIN CONNECTION
FP6301
FP6501-20,21 1
FP6501-19 2
FP6501-18 VTR KEY 5 3
FP6501-17 4
FP6501-16 RESET 5
FP6501-15 SP OUT1 6
FP6501-14 SP OUT1 7
FP6501-13 SP OUT2 8
FP6501-12 SP OUT2 9
FP6501-11 10
FP6501-10 ZOOM AD 11
FP6501-9 AVREF 12
FP6501-8 GND 13
FP6501-7 RTC INT 14
FP6501-6 RTC DIO 15
FP6501-5 RTC SCK 16
FP6501-4 RTC CS 17
FP6501-3 18
FP6501-3 19
FP6501-2 20
FP6501-1 RTC 3V 21
SP OUT1
SP OUT2
TO
SPEAKER
S6303
VSS0533
AUTO
M
MF
R6305
47K
VZ6307
VRT0158
R6304
47K
TO
CASSETTE COVER UNIT
FP6302
1
2
3 GND
4 ZOOM AD
5 AVREF
6
RESET
S6302
K0H1BA000436
R6303
470
VZ6301
VRT0158
IC2601
C1ZBZ0002438
(REAL TIME CLOCK)
3.3
1.3
2.8
1.9
VDD
SIO
SCK
CS
INT
XOUT
XIN
VSS
2.7
0.4
0.3
X2601
H0A327200093 (32.768KHz)
C2601
8P
C2603
0.1
R6301
1K
LITHIUM
BATTERY
B6101
ML-621S/F9D
C
B
A
1
2
3
4
5
NV-GS200GD,GS120GD SIDE (L) SCHEMATIC DIAGRAM

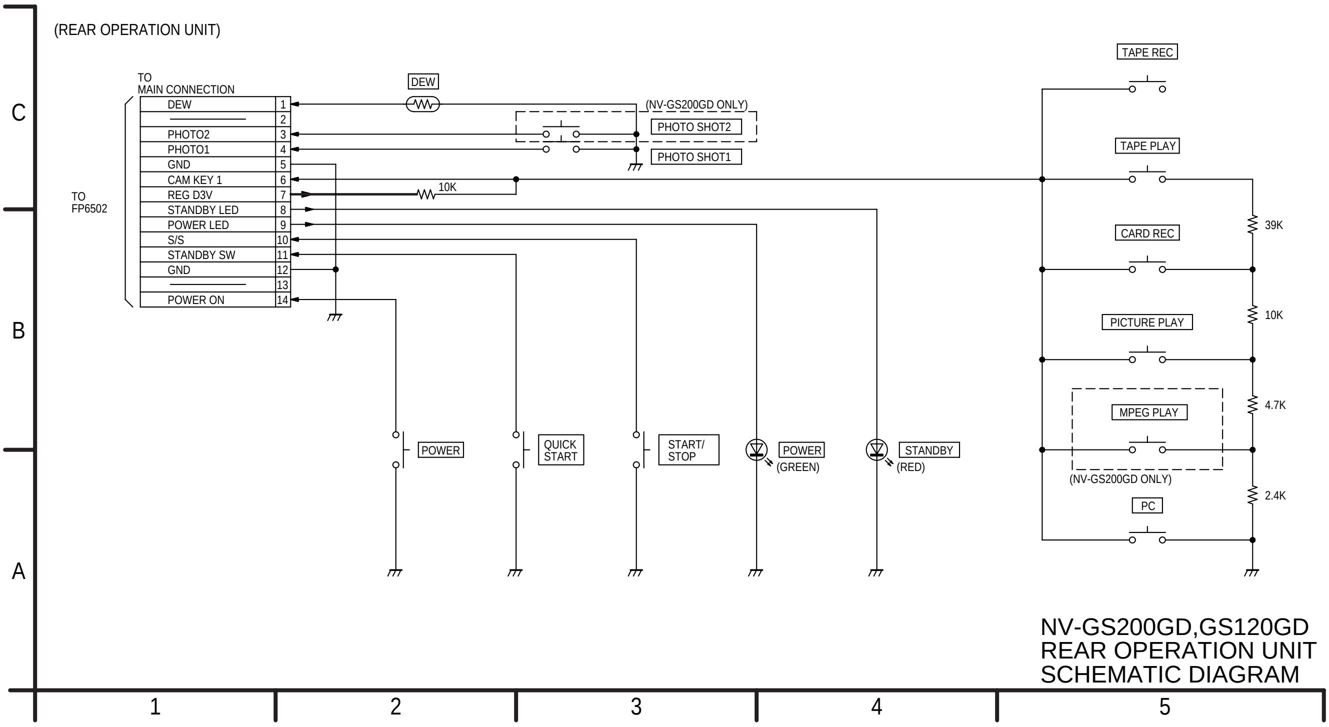
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART,PLEASEREFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

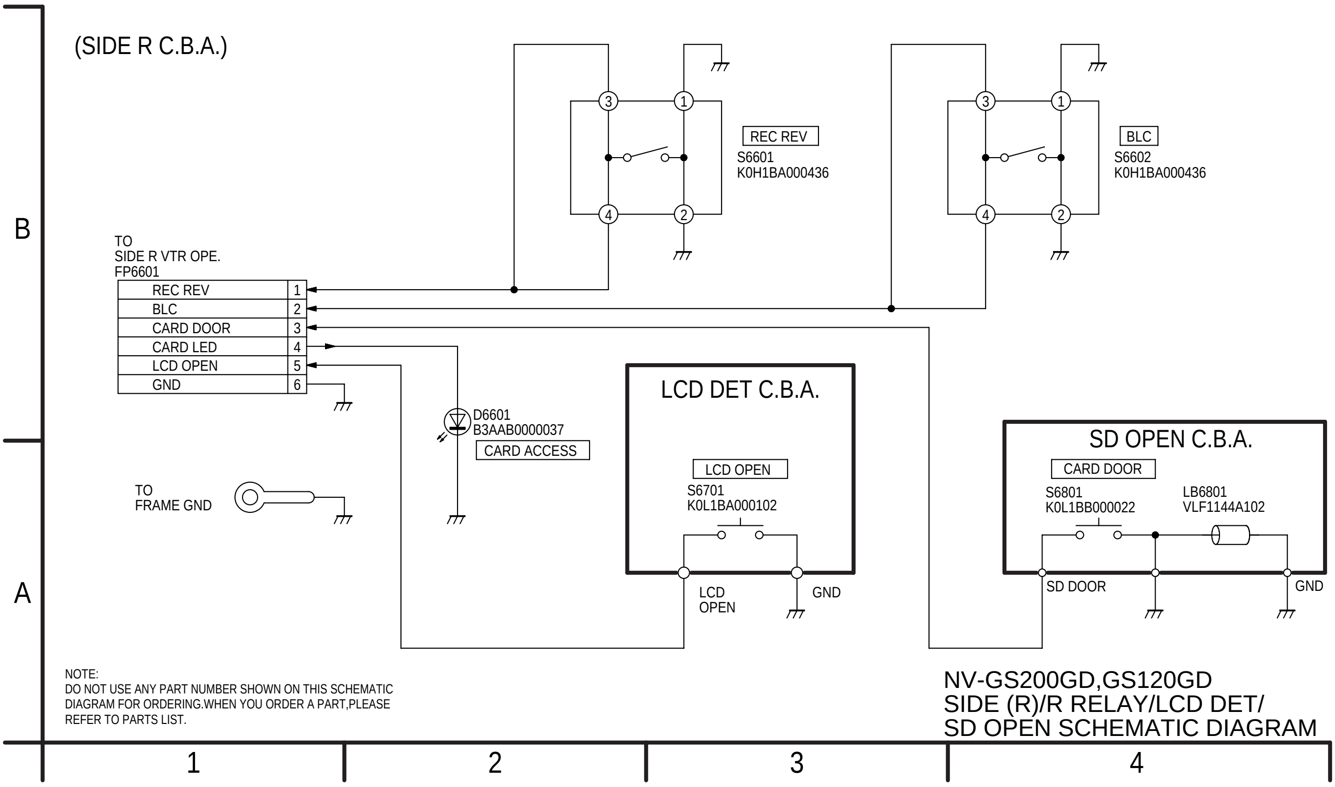
12.3. CASSETTE COVER UNIT SCHEMATIC DIAGRAM


(CASSETTE COVER UNIT)
TO
SIDE(L)
TO
FP6302
1
2
GND 3
ZOOM AD 4
AVREF 5
6
T
W
B
A
1
2
3
NV-GS200GD,GS120GD
CASSETTE COVER UNIT
SCHEMATIC DIAGRAM

12.4. REAR OPERATION UNIT SCHEMATIC DIAGRAM

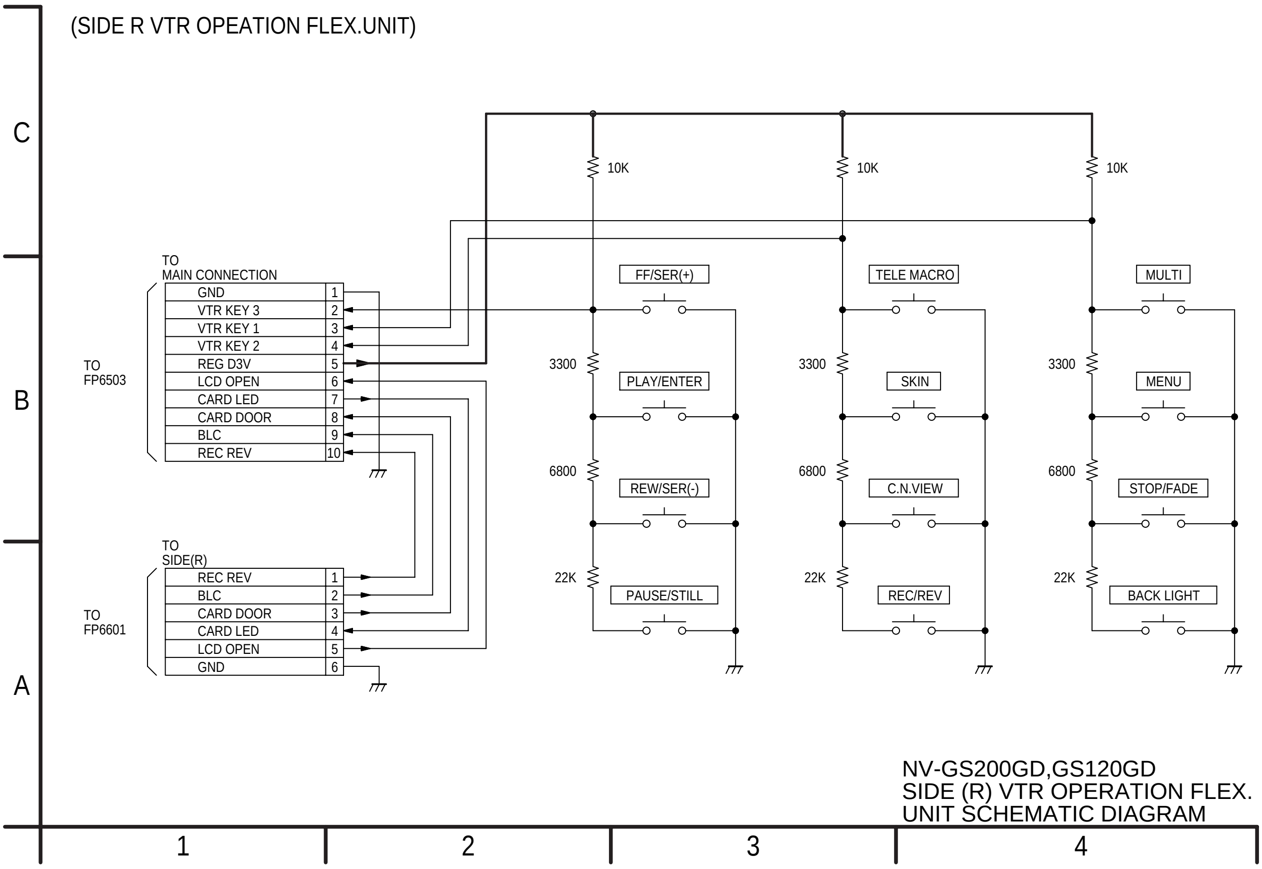

(REAR OPERATION UNIT)
TO MAIN CONNECTION
TO FP6502
DEW
PHOTO2
PHOTO1
GND
CAM KEY 1
REG D3V
STANDBY LED
POWER LED
S/S
STANDBY SW
GND
POWER ON
1
2
3
4
5
6
7
8
9
10
11
12
13
14
DEW
10K
(NV-GS200GD ONLY)
PHOTO SHOT2
PHOTO SHOT1
POWER
QUICK START
START/ STOP
POWER (GREEN)
STANDBY (RED)
TAPE REC
TAPE PLAY
CARD REC
PICTURE PLAY
MPEG PLAY
(NV-GS200GD ONLY)
PC
39K
10K
4.7K
2.4K
C
B
A
1
2
3
4
5
NV-GS200GD,GS120GD
REAR OPERATION UNIT
SCHEMATIC DIAGRAM

12.5. SIDE (R) / R RELAY / LCD DET / SD OPEN SCHEMATIC DIAGRAM

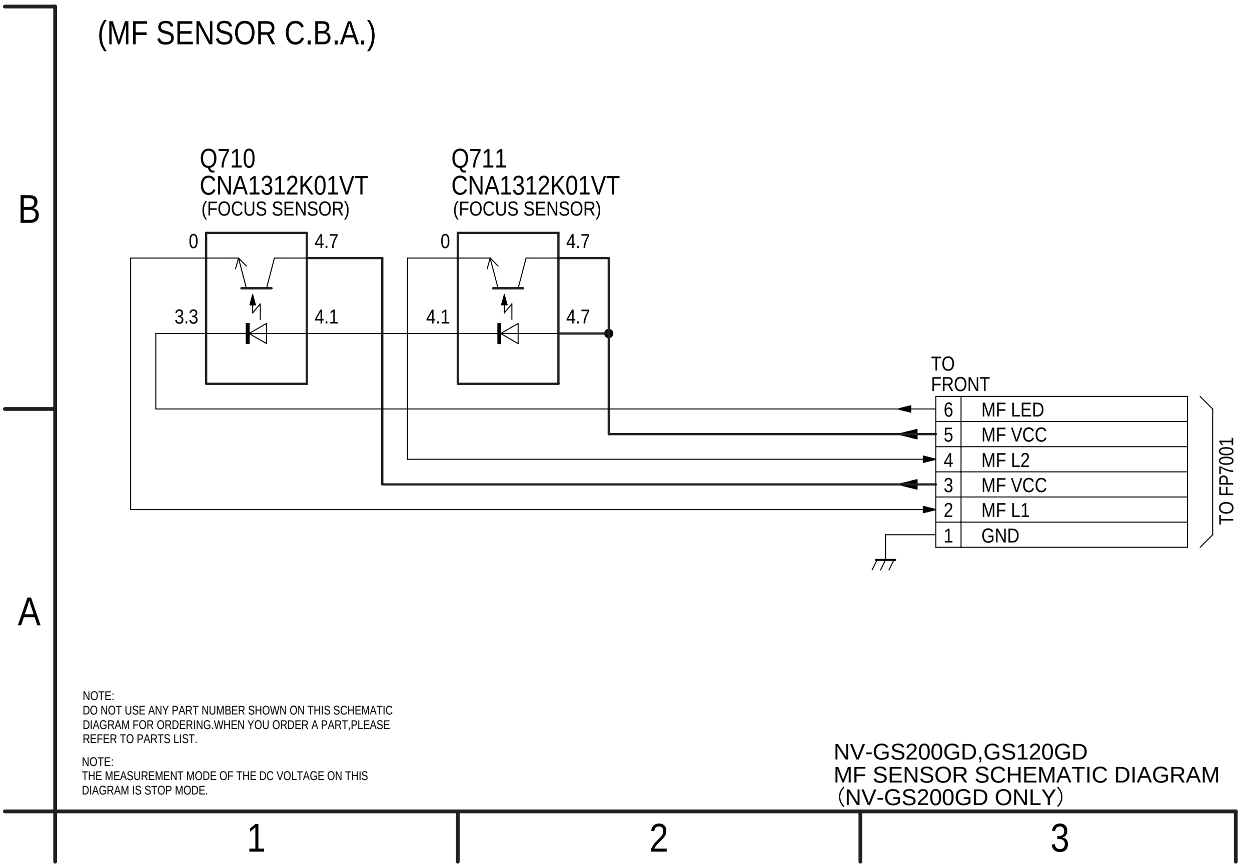

(SIDE R C.B.A.)
TO SIDE R VTR OPE. FP6601
REC REV
BLC
CARD DOOR
CARD LED
LCD OPEN
GND
1
2
3
4
5
6
3
1
4
2
REC REV
S6601
K0H1BA000436
BLC
S6602
K0H1BA000436
D6601
B3AAB0000037
CARD ACCESS
TO FRAME GND
LCD DET C.B.A.
LCD OPEN
S6701
K0L1BA000102
LCD OPEN
GND
SD OPEN C.B.A.
CARD DOOR
S6801
K0L1BB000022
LB6801
VLF1144A102
SD DOOR
GND
B
A
1
2
3
4
NV-GS200GD,GS120GD
SIDE (R)/R RELAY/LCD DET/
SD OPEN SCHEMATIC DIAGRAM

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

12.6. SIDE (R) VTR OPERATION FLEX. UNIT SCHEMATIC DIAGRAM


(SIDE R VTR OPEATION FLEX.UNIT)
C
B
A
TO
MAIN CONNECTION
TO
FP6503
GND 1
VTR KEY 3 2
VTR KEY 1 3
VTR KEY 2 4
REG D3V 5
LCD OPEN 6
CARD LED 7
CARD DOOR 8
BLC 9
REC REV 10
TO
SIDE(R)
TO
FP6601
REC REV 1
BLC 2
CARD DOOR 3
CARD LED 4
LCD OPEN 5
GND 6
10K
10K
10K
FF/SER(+)
TELE MACRO
MULTI
3300
3300
3300
PLAY/ENTER
SKIN
MENU
6800
6800
6800
REW/SER(-)
C.N.VIEW
STOP/FADE
22K
22K
22K
PAUSE/STILL
REC/REV
BACK LIGHT
NV-GS200GD,GS120GD
SIDE (R) VTR OPERATION FLEX.
UNIT SCHEMATIC DIAGRAM
1
2
3
4

12.7. MF SENSOR SCHEMATIC DIAGRAM (NV-GS200GD ONLY)


(MF SENSOR C.B.A.)
B
A
Q710
CNA1312K01VT
(FOCUS SENSOR)
Q711
CNA1312K01VT
(FOCUS SENSOR)
0
4.7
3.3
4.1
0
4.7
4.1
4.7
TO
FRONT
6 MF LED
5 MF VCC
4 MF L2
3 MF VCC
2 MF L1
1 GND
TO FP7001
NV-GS200GD,GS120GD
MF SENSOR SCHEMATIC DIAGRAM
(NV-GS200GD ONLY)
1
2
3

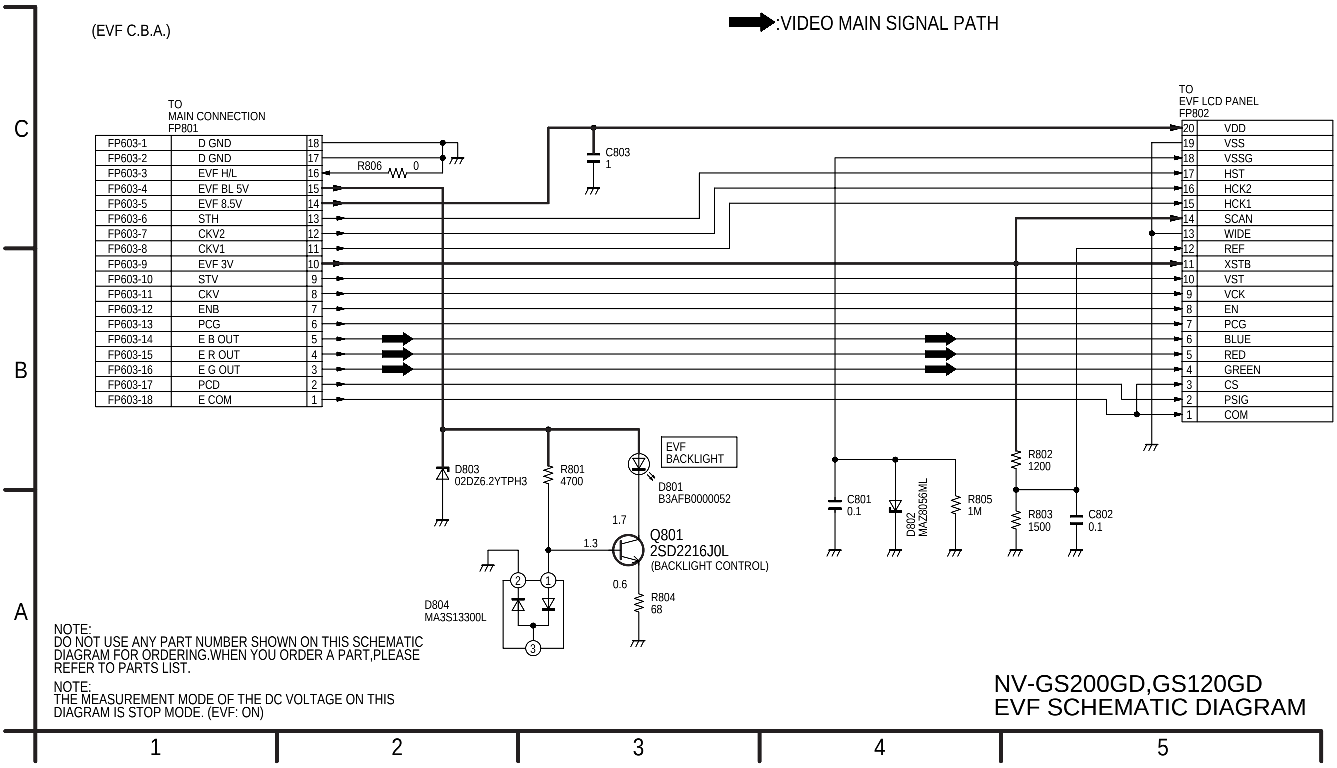
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

12.8.

12.9.

12.8. EVF SCHEMATIC DIAGRAM

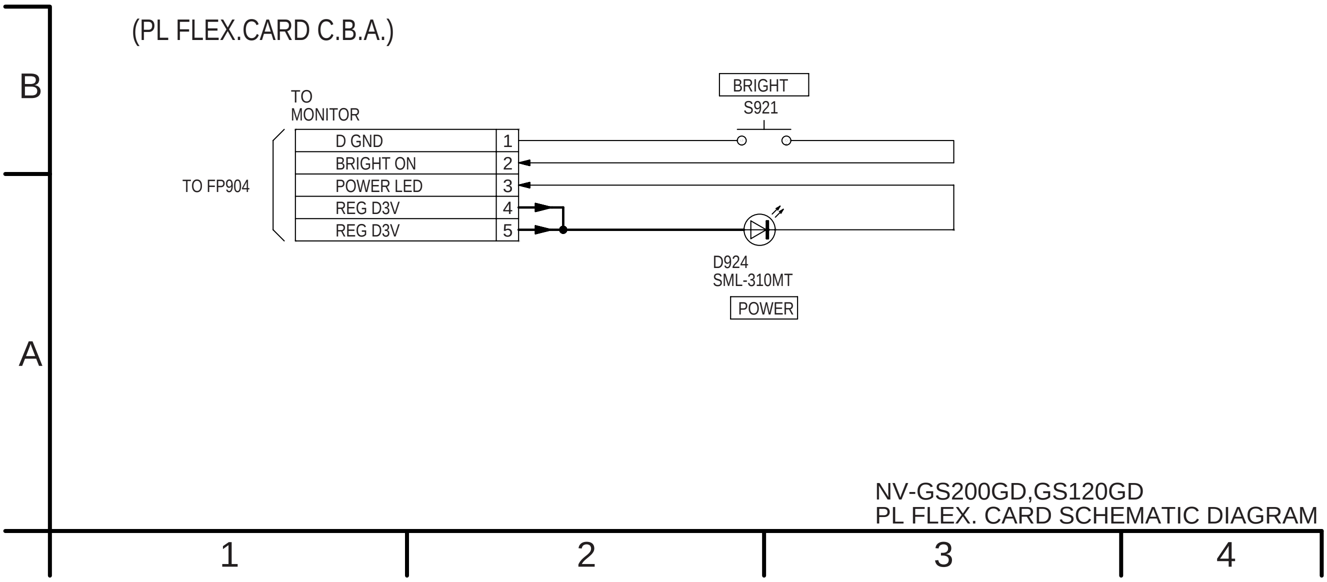

:VIDEO MAIN SIGNAL PATH
(EVF C.B.A.)
TO
MAIN CONNECTION
FP801
FP603-1 D GND 18
FP603-2 D GND 17
FP603-3 EVF H/L 16
FP603-4 EVF BL 5V 15
FP603-5 EVF 8.5V 14
FP603-6 STH 13
FP603-7 CKV2 12
FP603-8 CKV1 11
FP603-9 EVF 3V 10
FP603-10 STV 9
FP603-11 CKV 8
FP603-12 ENB 7
FP603-13 PCG 6
FP603-14 E B OUT 5
FP603-15 E R OUT 4
FP603-16 E G OUT 3
FP603-17 PCD 2
FP603-18 E COM 1
R806 0
C803 1
TO
EVF LCD PANEL
FP802
20 VDD
19 VSS
18 VSSG
17 HST
16 HCK2
15 HCK1
14 SCAN
13 WIDE
12 REF
11 XSTB
10 VST
9 VCK
8 EN
7 PCG
6 BLUE
5 RED
4 GREEN
3 CS
2 PSIG
1 COM
EVF BACKLIGHT
D803 02DZ6.2YTPH3
R801 4700
D801 B3AFB0000052
1.7
1.3
Q801 2SD2216J0L
(BACKLIGHT CONTROL)
0.6
R804 68
D804 MA3S13300L
C801 0.1
D802 MAZ8056ML
R805 1M
R802 1200
R803 1500
C802 0.1
C
B
A
1
2
3
4
5

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE. (EVF: ON)

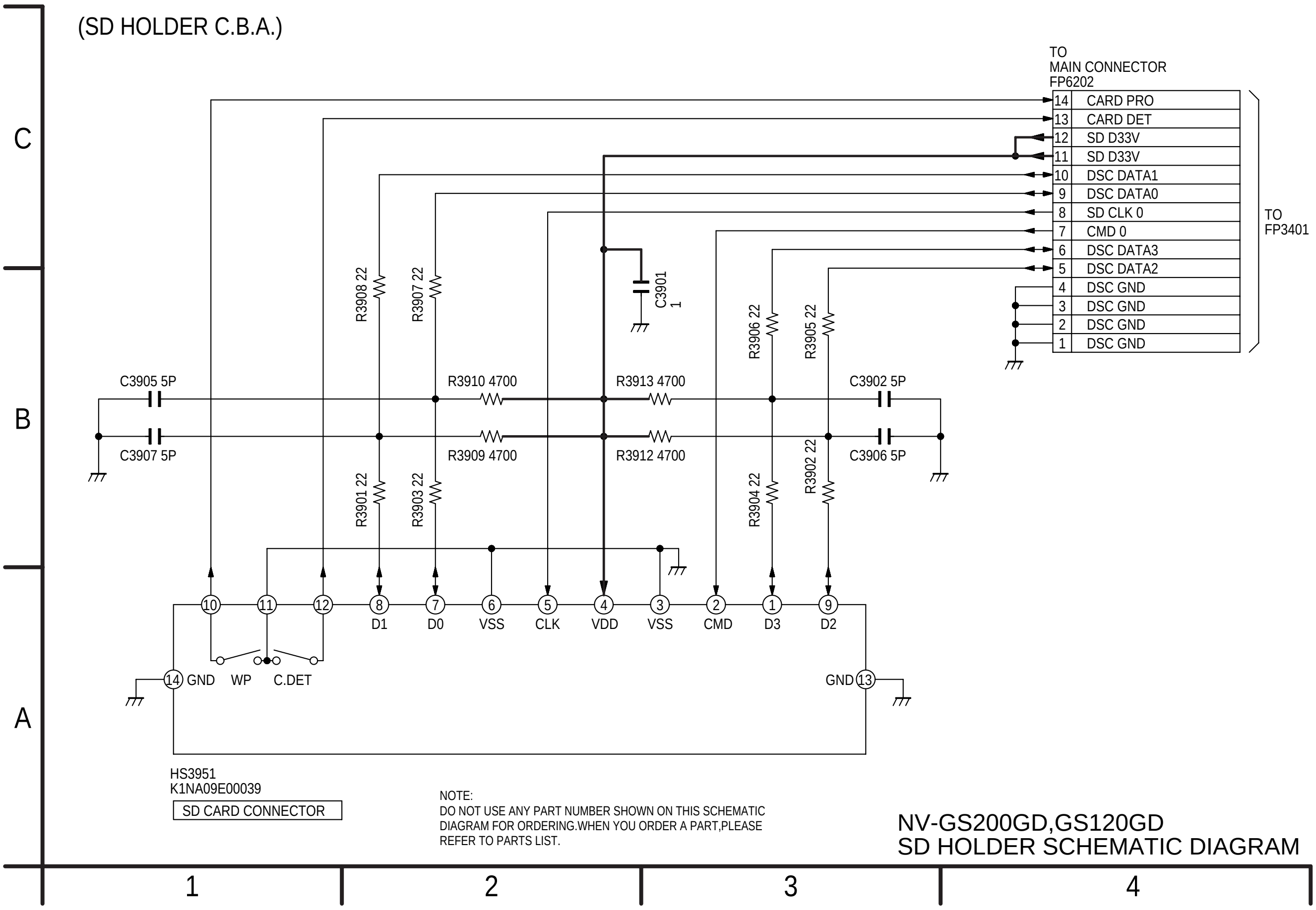
NV-GS200GD,GS120GD
EVF SCHEMATIC DIAGRAM

12.9. PL FLEX. CARD SCHEMATIC DIAGRAM


(PL FLEX.CARD C.B.A.)
TO
MONITOR
TO FP904
D GND 1
BRIGHT ON 2
POWER LED 3
REG D3V 4
REG D3V 5
BRIGHT
S921
D924
SML-310MT
POWER
B
A
1
2
3
4

NV-GS200GD,GS120GD
PL FLEX. CARD SCHEMATIC DIAGRAM

12.10. SD HOLDER SCHEMATIC DIAGRAM


(SD HOLDER C.B.A.)
TO
MAIN CONNECTOR
FP6202
14 CARD PRO
13 CARD DET
12 SD D33V
11 SD D33V
10 DSC DATA1
9 DSC DATA0
8 SD CLK 0
7 CMD 0
6 DSC DATA3
5 DSC DATA2
4 DSC GND
3 DSC GND
2 DSC GND
1 DSC GND
TO
FP3401
R3908 22
R3907 22
C3901
1
R3906 22
R3905 22
C3905 5P
R3910 4700
R3913 4700
C3902 5P
C3907 5P
R3909 4700
R3912 4700
C3906 5P
R3901 22
R3903 22
R3904 22
R3902 22
10
11
12
8
D1
7
D0
6
VSS
5
CLK
4
VDD
3
VSS
2
CMD
1
D3
9
D2
14 GND
WP
C.DET
GND 13
HS3951
K1NA09E00039
SD CARD CONNECTOR
C
B
A
1
2
3
4

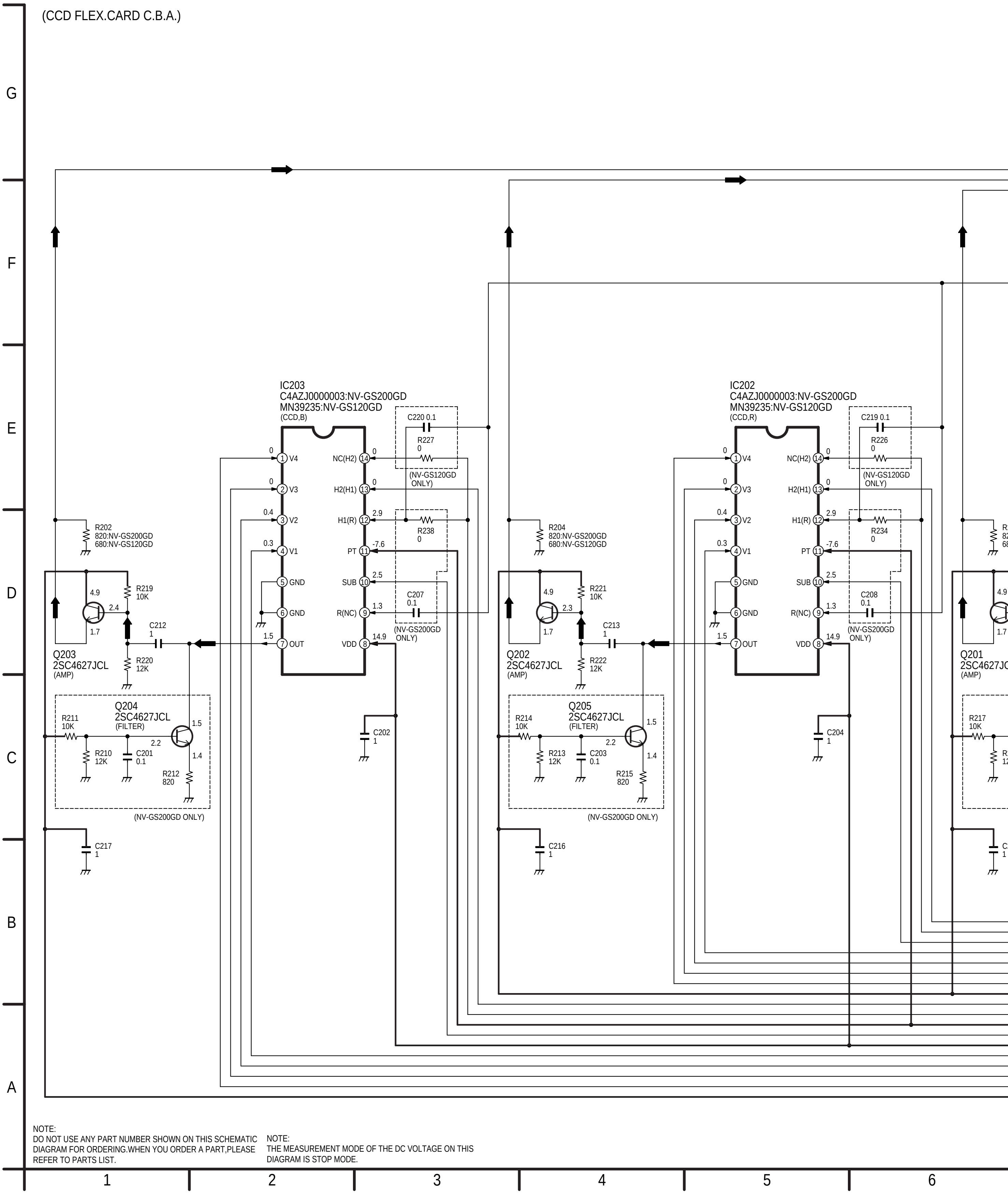
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-GS200GD,GS120GD
SD HOLDER SCHEMATIC DIAGRAM

TO
FP3401

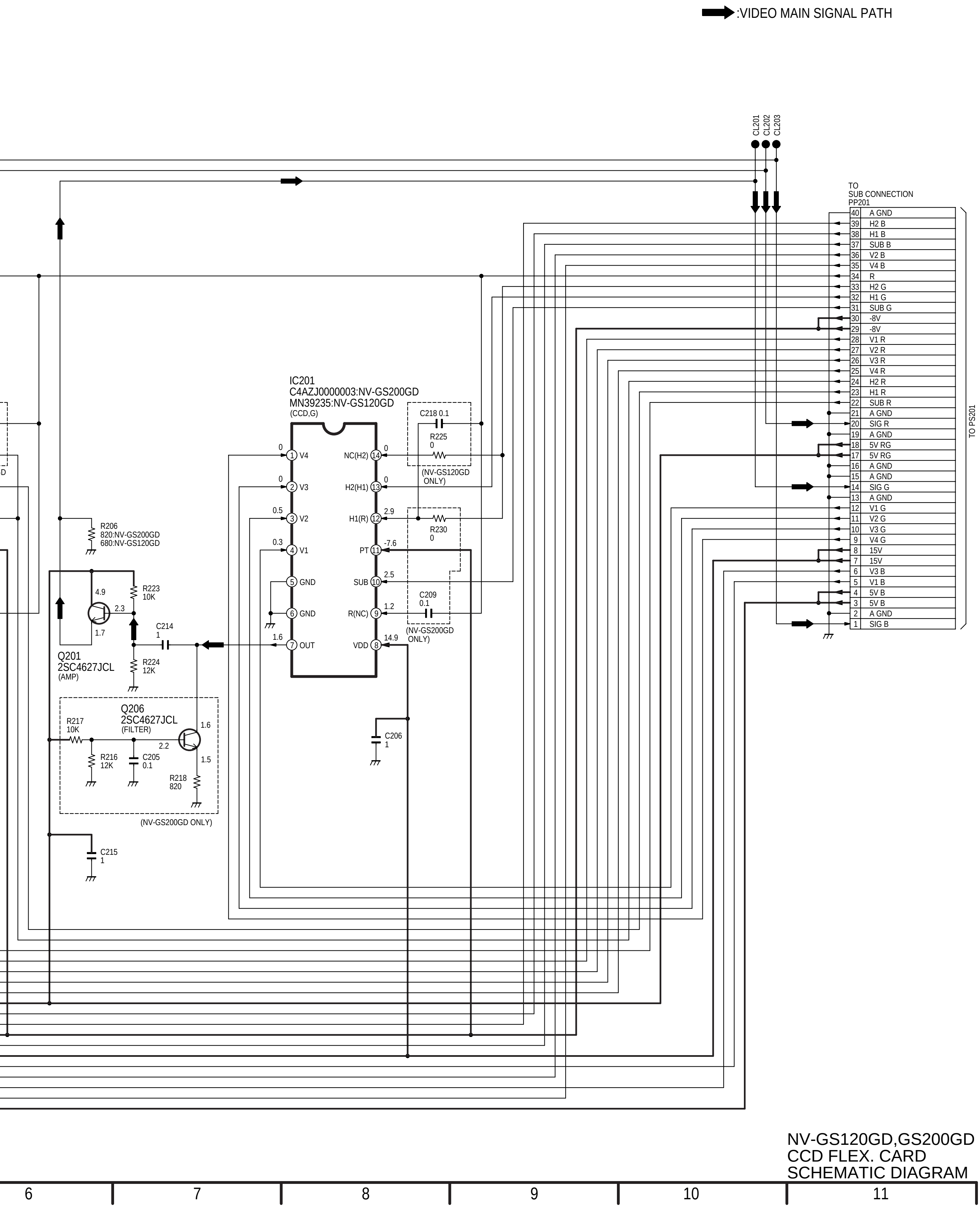
RAM

12.11. CCD FLEX. CARD SCHEMATIC DIAGRAM


(CCD FLEX.CARD C.B.A.)
G
F
E
D
C
B
A
1
2
3
4
5
6
IC203
C4AZJ0000003:NV-GS200GD
MN39235:NV-GS120GD
(CCD,B)
V4
V3
V2
V1
GND
GND
OUT
NC(H2)
H2(H1)
H1(R)
PT
SUB
R(NC)
VDD
C220 0.1
R227
0
(NV-GS120GD ONLY)
R238
0
C207
0.1
(NV-GS200GD ONLY)
-7.6
2.5
1.3
14.9
2.9
0.4
0.3
1.5
C202
1
R202
820:NV-GS200GD
680:NV-GS120GD
R219
10K
C212
1
R220
12K
Q203
2SC4627JCL
(AMP)
4.9
2.4
1.7
Q204
2SC4627JCL
(FILTER)
R211
10K
R210
12K
C201
0.1
R212
820
2.2
1.5
1.4
(NV-GS200GD ONLY)
C217
1
IC202
C4AZJ0000003:NV-GS200GD
MN39235:NV-GS120GD
(CCD,R)
C219 0.1
R226
0
R234
0
C208
0.1
C204
1
R204
820:NV-GS200GD
680:NV-GS120GD
R221
10K
C213
1
R222
12K
Q202
2SC4627JCL
(AMP)
2.3
Q205
2SC4627JCL
(FILTER)
R214
10K
R213
12K
C203
0.1
R215
820
C216
1
Q201
R217
10K

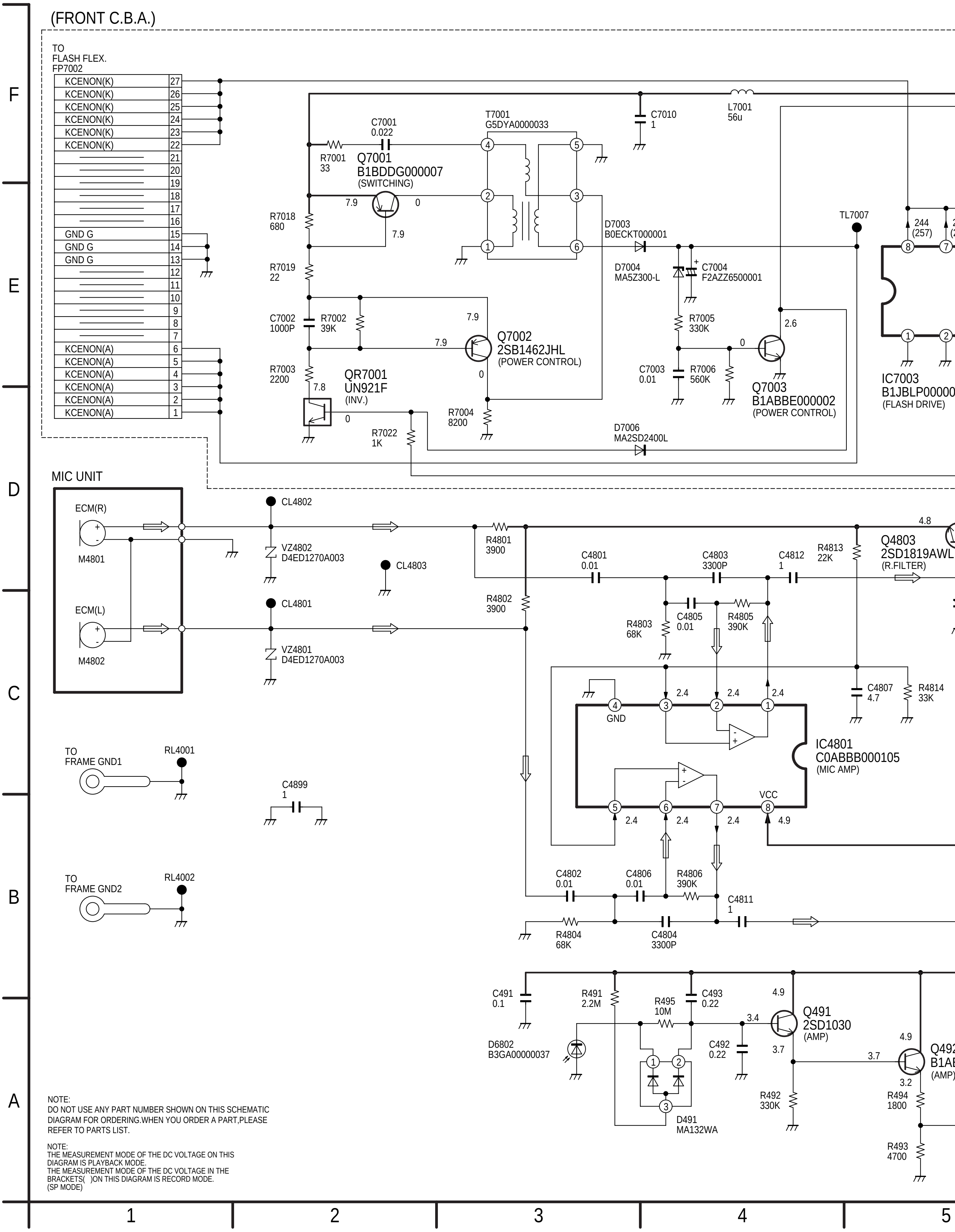
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.


:VIDEO MAIN SIGNAL PATH
CL201
CL202
CL203
TO
SUB CONNECTION
PP201
40 A GND
39 H2 B
38 H1 B
37 SUB B
36 V2 B
35 V4 B
34 R
33 H2 G
32 H1 G
31 SUB G
30 -8V
29 -8V
28 V1 R
27 V2 R
26 V3 R
25 V4 R
24 H2 R
23 H1 R
22 SUB R
21 A GND
20 SIG R
19 A GND
18 5V RG
17 5V RG
16 A GND
15 A GND
14 SIG G
13 A GND
12 V1 G
11 V2 G
10 V3 G
9 V4 G
8 15V
7 15V
6 V3 B
5 V1 B
4 5V B
3 5V B
2 A GND
1 SIG B
TO PS201
IC201
C4AZJ0000003:NV-GS200GD
MN39235:NV-GS120GD
(CCD,G)
V4
V3
V2
V1
GND
GND
OUT
NC(H2)
H2(H1)
H1(R)
PT
SUB
R(NC)
VDD
C218 0.1
R225
0
(NV-GS120GD
ONLY)
R230
0
C209
0.1
(NV-GS200GD
ONLY)
C206
1
R206
820:NV-GS200GD
680:NV-GS120GD
R223
10K
R224
12K
C214
1
Q201
2SC4627JCL
(AMP)
Q206
2SC4627JCL
(FILTER)
R217
10K
R216
12K
C205
0.1
R218
820
(NV-GS200GD ONLY)
C215
1
4.9
2.3
1.7
1.6
2.2
1.5
0
0
0.5
0.3
1.6
0
0
2.9
-7.6
2.5
1.2
14.9
D
6
7
8
9
10
11

NV-GS120GD,GS200GD
CCD FLEX. CARD
SCHEMATIC DIAGRAM

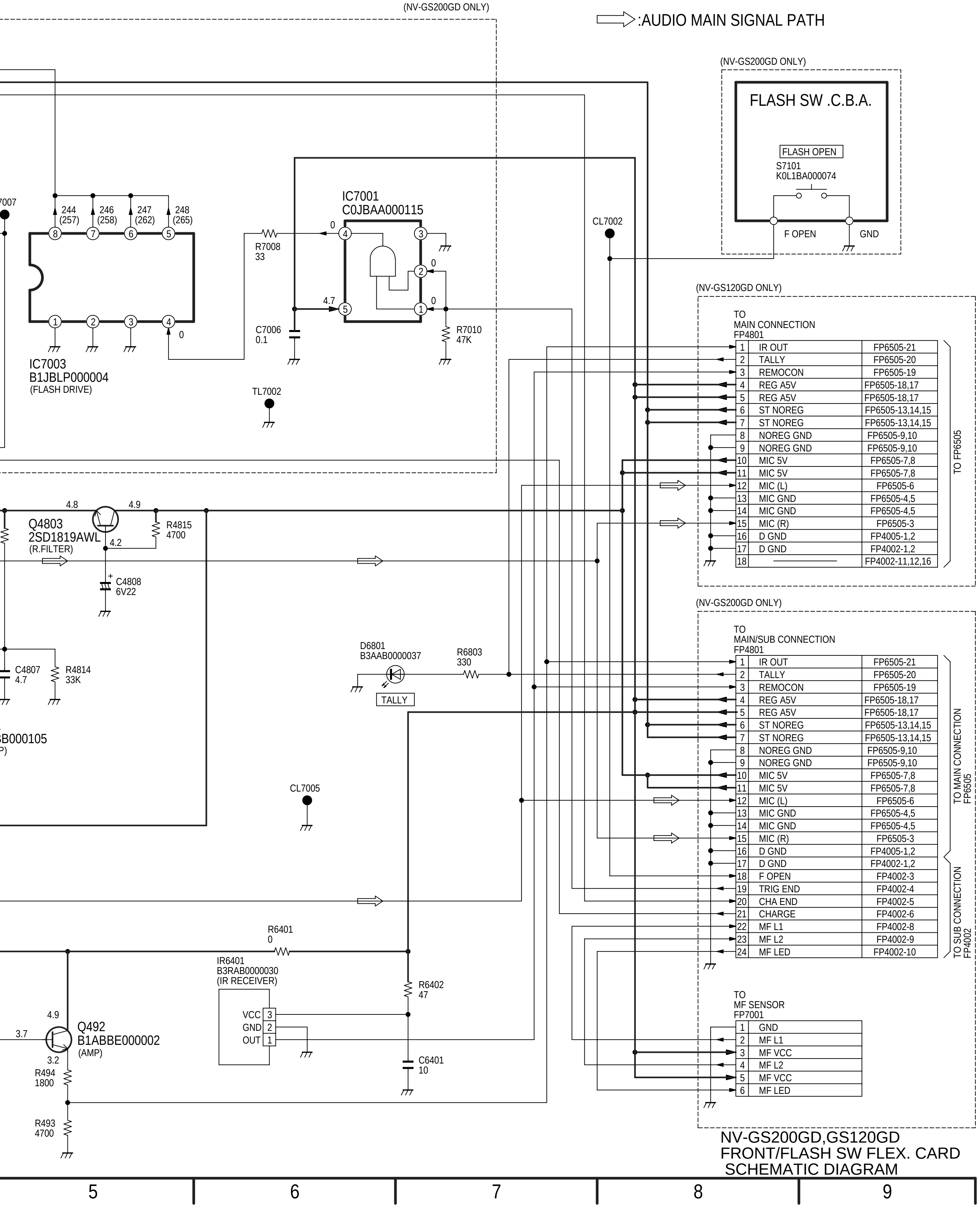
12.12. FRONT / FLASH SW FLEX. CARD SCHEMATIC DIAGRAM



(FRONT C.B.A.)
TO
FLASH FLEX.
FP7002
KCENON(K) 27
KCENON(K) 26
KCENON(K) 25
KCENON(K) 24
KCENON(K) 23
KCENON(K) 22
21
20
19
18
17
16
GND G 15
GND G 14
GND G 13
12
11
10
9
8
7
KCENON(A) 6
KCENON(A) 5
KCENON(A) 4
KCENON(A) 3
KCENON(A) 2
KCENON(A) 1
C7001
0.022
R7001
33
Q7001
B1BDDG000007
(SWITCHING)
T7001
G5DYA0000033
C7010
1
L7001
56u
R7018
680
R7019
22
C7002
1000P
R7002
39K
R7003
2200
QR7001
UN921F
(INV.)
R7022
1K
R7004
8200
Q7002
2SB1462JHL
(POWER CONTROL)
D7003
B0ECKT000001
D7004
MA5Z300-L
C7004
F2AZZ6500001
R7005
330K
C7003
0.01
R7006
560K
Q7003
B1ABBE000002
(POWER CONTROL)
D7006
MA2SD2400L
TL7007
244
(257)
IC7003
B1JBLP00000
(FLASH DRIVE)
7.9
0
7.9
7.9
7.9
7.8
0
0
0
2.6
MIC UNIT
ECM(R)
M4801
ECM(L)
M4802
CL4802
VZ4802
D4ED1270A003
CL4803
CL4801
VZ4801
D4ED1270A003
R4801
3900
R4802
3900
C4801
0.01
C4803
3300P
C4812
1
R4813
22K
Q4803
2SD1819AWL
(R.FILTER)
4.8
R4803
68K
C4805
0.01
R4805
390K
C4807
4.7
R4814
33K
GND
2.4
2.4
2.4
IC4801
C0ABBB000105
(MIC AMP)
VCC
2.4
2.4
2.4
4.9
C4802
0.01
C4806
0.01
R4806
390K
C4811
1
R4804
68K
C4804
3300P
TO
FRAME GND1
RL4001
C4899
1
TO
FRAME GND2
RL4002
C491
0.1
R491
2.2M
R495
10M
C493
0.22
4.9
Q491
2SD1030
(AMP)
3.4
D6802
B3GA00000037
C492
0.22
3.7
4.9
3.7
Q492
B1AE
(AMP)
3.2
D491
MA132WA
R492
330K
R494
1800
R493
4700
F
E
D
C
B
A
1
2
3
4
5

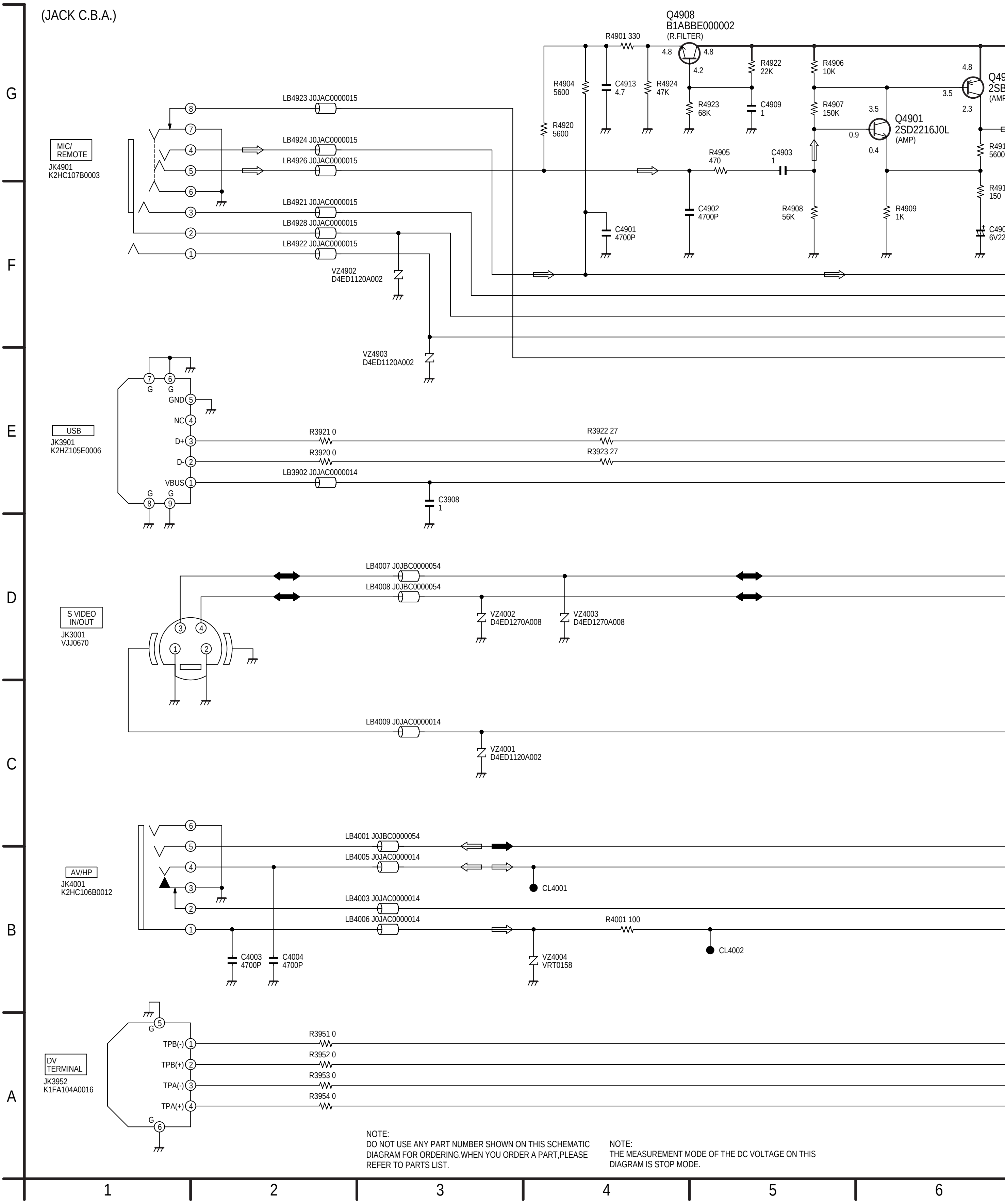
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE.
(SP MODE)


(NV-GS200GD ONLY)
:AUDIO MAIN SIGNAL PATH
(NV-GS200GD ONLY)
FLASH SW .C.B.A.
FLASH OPEN
S7101
K0L1BA000074
F OPEN
GND
CL7002
IC7001
C0JBAA000115
R7008
33
C7006
0.1
R7010
47K
4.7
0
TL7002
7007
244 (257)
246 (258)
247 (262)
248 (265)
IC7003
B1JBLP000004
(FLASH DRIVE)
Q4803
2SD1819AWL
(R.FILTER)
4.8
4.9
4.2
R4815
4700
C4808
6V22
C4807
4.7
R4814
33K
B000105
P)
D6801
B3AAB0000037
TALLY
R6803
330
CL7005
R6401
0
IR6401
B3RAB0000030
(IR RECEIVER)
VCC 3
GND 2
OUT 1
R6402
47
C6401
10
Q492
B1ABBE000002
(AMP)
4.9
3.7
3.2
R494
1800
R493
4700
(NV-GS120GD ONLY)
TO MAIN CONNECTION FP4801
1 IR OUT FP6505-21
2 TALLY FP6505-20
3 REMOCON FP6505-19
4 REG A5V FP6505-18,17
5 REG A5V FP6505-18,17
6 ST NOREG FP6505-13,14,15
7 ST NOREG FP6505-13,14,15
8 NOREG GND FP6505-9,10
9 NOREG GND FP6505-9,10
10 MIC 5V FP6505-7,8
11 MIC 5V FP6505-7,8
12 MIC (L) FP6505-6
13 MIC GND FP6505-4,5
14 MIC GND FP6505-4,5
15 MIC (R) FP6505-3
16 D GND FP4005-1,2
17 D GND FP4002-1,2
18 FP4002-11,12,16
TO FP6505
(NV-GS200GD ONLY)
TO MAIN/SUB CONNECTION FP4801
1 IR OUT FP6505-21
2 TALLY FP6505-20
3 REMOCON FP6505-19
4 REG A5V FP6505-18,17
5 REG A5V FP6505-18,17
6 ST NOREG FP6505-13,14,15
7 ST NOREG FP6505-13,14,15
8 NOREG GND FP6505-9,10
9 NOREG GND FP6505-9,10
10 MIC 5V FP6505-7,8
11 MIC 5V FP6505-7,8
12 MIC (L) FP6505-6
13 MIC GND FP6505-4,5
14 MIC GND FP6505-4,5
15 MIC (R) FP6505-3
16 D GND FP4005-1,2
17 D GND FP4002-1,2
18 F OPEN FP4002-3
19 TRIG END FP4002-4
20 CHA END FP4002-5
21 CHARGE FP4002-6
22 MF L1 FP4002-8
23 MF L2 FP4002-9
24 MF LED FP4002-10
TO MAIN CONNECTION FP6505
TO SUB CONNECTION FP4002
TO MF SENSOR FP7001
1 GND
2 MF L1
3 MF VCC
4 MF L2
5 MF VCC
6 MF LED
5
6
7
8
9

NV-GS200GD,GS120GD
FRONT/FLASH SW FLEX. CARD
SCHEMATIC DIAGRAM

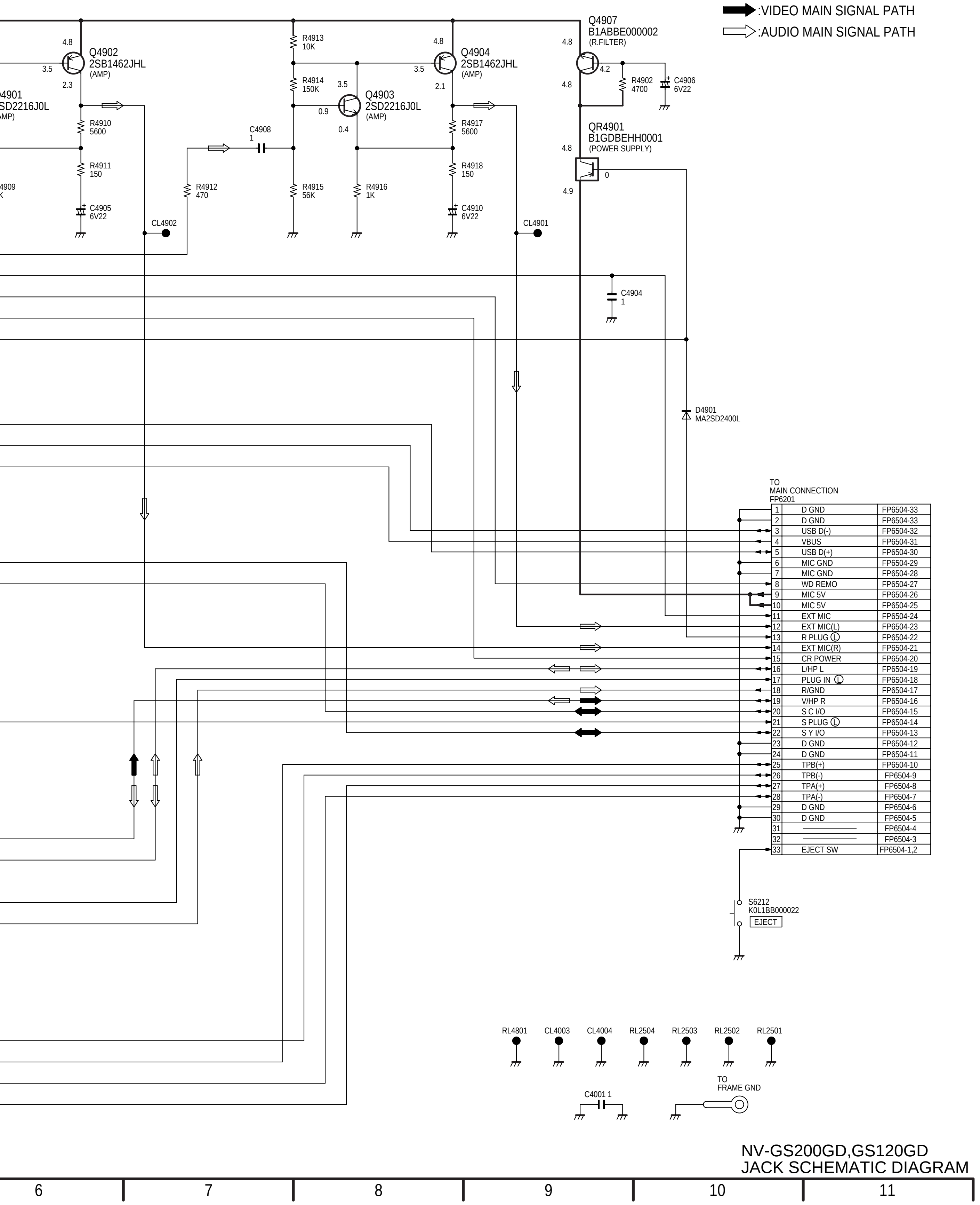
12.13. JACK SCHEMATIC DIAGRAM



(JACK C.B.A.)
G
F
E
D
C
B
A
1
2
3
4
5
6
MIC/ REMOTE
JK4901
K2HC107B0003
LB4923 J0JAC0000015
LB4924 J0JAC0000015
LB4926 J0JAC0000015
LB4921 J0JAC0000015
LB4928 J0JAC0000015
LB4922 J0JAC0000015
VZ4902
D4ED1120A002
VZ4903
D4ED1120A002
Q4908
B1ABBE000002
(R.FILTER)
R4901 330
4.8
4.8
4.2
R4904
5600
C4913
4.7
R4924
47K
R4922
22K
R4923
68K
C4909
1
R4906
10K
R4907
150K
R4920
5600
R4905
470
C4903
1
C4902
4700P
C4901
4700P
R4908
56K
Q4901
2SD2216J0L
(AMP)
3.5
0.9
0.4
R4909
1K
4.8
3.5
2.3
Q49
2SB
(AMP
R491
5600
R491
150
C490
6V22
USB
JK3901
K2HZ105E0006
G
G
GND
NC
D+
D-
VBUS
G
G
R3921 0
R3920 0
R3922 27
R3923 27
LB3902 J0JAC0000014
C3908
1
S VIDEO IN/OUT
JK3001
VJJ0670
LB4007 J0JBC0000054
LB4008 J0JBC0000054
VZ4002
D4ED1270A008
VZ4003
D4ED1270A008
LB4009 J0JAC0000014
VZ4001
D4ED1120A002
AV/HP
JK4001
K2HC106B0012
LB4001 J0JBC0000054
LB4005 J0JAC0000014
LB4003 J0JAC0000014
LB4006 J0JAC0000014
CL4001
R4001 100
CL4002
C4003
4700P
C4004
4700P
VZ4004
VRT0158
DV TERMINAL
JK3952
K1FA104A0016
G
TPB(-)
TPB(+)
TPA(-)
TPA(+)
G
R3951 0
R3952 0
R3953 0
R3954 0

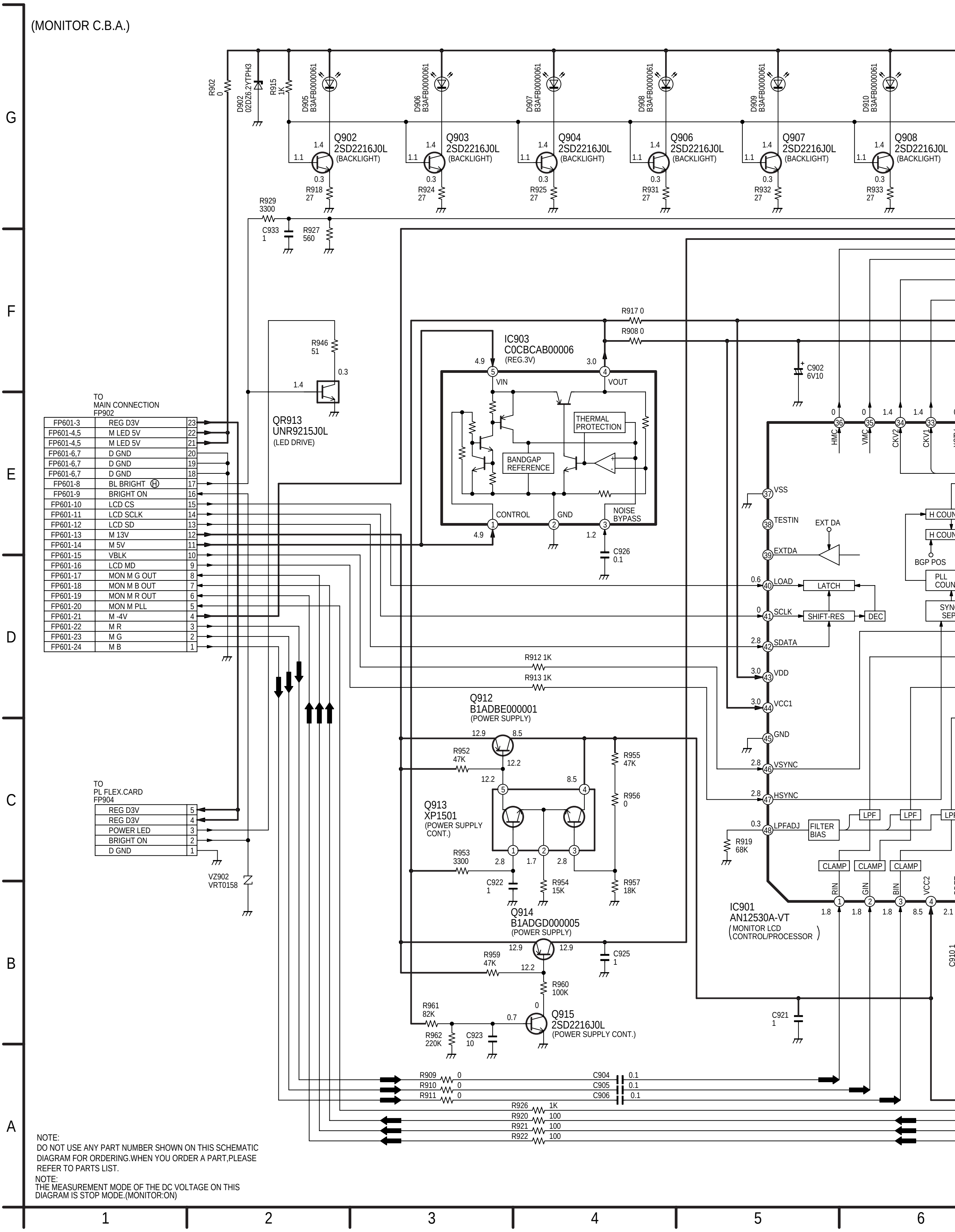
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.


:VIDEO MAIN SIGNAL PATH
:AUDIO MAIN SIGNAL PATH
Q4902
2SB1462JHL
(AMP)
4.8
3.5
2.3
Q4901
2SD2216J0L
(AMP)
R4910
5600
R4911
150
R4909
C4905
6V22
CL4902
R4912
470
C4908
1
R4913
10K
R4914
150K
R4915
56K
Q4903
2SD2216J0L
(AMP)
3.5
0.9
0.4
R4916
1K
Q4904
2SB1462JHL
(AMP)
4.8
3.5
2.1
R4917
5600
R4918
150
C4910
6V22
CL4901
Q4907
B1ABBE000002
(R.FILTER)
4.8
4.2
4.8
R4902
4700
C4906
6V22
QR4901
B1GDBEHH0001
(POWER SUPPLY)
4.8
0
4.9
C4904
1
D4901
MA2SD2400L
TO
MAIN CONNECTION
FP6201
1 D GND FP6504-33
2 D GND FP6504-33
3 USB D(-) FP6504-32
4 VBUS FP6504-31
5 USB D(+) FP6504-30
6 MIC GND FP6504-29
7 MIC GND FP6504-28
8 WD REMO FP6504-27
9 MIC 5V FP6504-26
10 MIC 5V FP6504-25
11 EXT MIC FP6504-24
12 EXT MIC(L) FP6504-23
13 R PLUG Ⓛ FP6504-22
14 EXT MIC(R) FP6504-21
15 CR POWER FP6504-20
16 L/HP L FP6504-19
17 PLUG IN Ⓛ FP6504-18
18 R/GND FP6504-17
19 V/HP R FP6504-16
20 S C I/O FP6504-15
21 S PLUG Ⓛ FP6504-14
22 S Y I/O FP6504-13
23 D GND FP6504-12
24 D GND FP6504-11
25 TPB(+) FP6504-10
26 TPB(-) FP6504-9
27 TPA(+) FP6504-8
28 TPA(-) FP6504-7
29 D GND FP6504-6
30 D GND FP6504-5
31 FP6504-4
32 FP6504-3
33 EJECT SW FP6504-1,2
S6212
K0L1BB000022
EJECT
RL4801
CL4003
CL4004
RL2504
RL2503
RL2502
RL2501
C4001 1
TO
FRAME GND
6
7
8
9
10
11

NV-GS200GD,GS120GD
JACK SCHEMATIC DIAGRAM

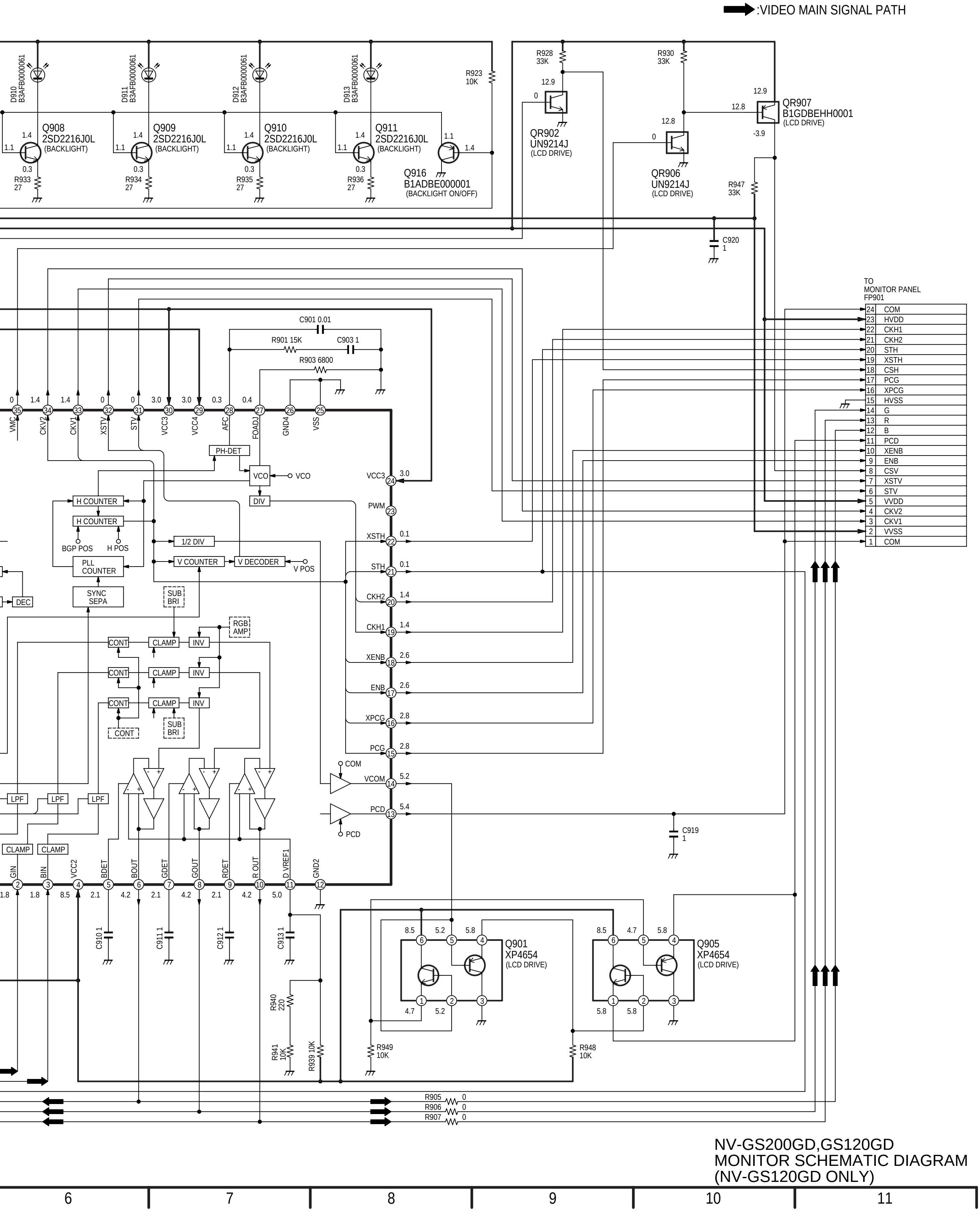
12.14. MONITOR SCHEMATIC DIAGRAM (NV-GS120GD ONLY)



(MONITOR C.B.A.)
G
F
E
D
C
B
A
1
2
3
4
5
6
R902 0
D902 02DZ6.2YTPH3
R915 1K
D905 B3AFB0000061
D906 B3AFB0000061
D907 B3AFB0000061
D908 B3AFB0000061
D909 B3AFB0000061
D910 B3AFB0000061
Q902 2SD2216J0L (BACKLIGHT)
Q903 2SD2216J0L (BACKLIGHT)
Q904 2SD2216J0L (BACKLIGHT)
Q906 2SD2216J0L (BACKLIGHT)
Q907 2SD2216J0L (BACKLIGHT)
Q908 2SD2216J0L (BACKLIGHT)
R918 27
R924 27
R925 27
R931 27
R932 27
R933 27
R929 3300
C933 1
R927 560
R946 51
QR913 UNR9215J0L (LED DRIVE)
TO MAIN CONNECTION FP902
FP601-3 REG D3V 23
FP601-4,5 M LED 5V 22
FP601-4,5 M LED 5V 21
FP601-6,7 D GND 20
FP601-6,7 D GND 19
FP601-6,7 D GND 18
FP601-8 BL BRIGHT Ⓗ 17
FP601-9 BRIGHT ON 16
FP601-10 LCD CS 15
FP601-11 LCD SCLK 14
FP601-12 LCD SD 13
FP601-13 M 13V 12
FP601-14 M 5V 11
FP601-15 VBLK 10
FP601-16 LCD MD 9
FP601-17 MON M G OUT 8
FP601-18 MON M B OUT 7
FP601-19 MON M R OUT 6
FP601-20 MON M PLL 5
FP601-21 M -4V 4
FP601-22 M R 3
FP601-23 M G 2
FP601-24 M B 1
TO PL FLEX.CARD FP904
REG D3V 5
REG D3V 4
POWER LED 3
BRIGHT ON 2
D GND 1
VZ902 VRT0158
R917 0
R908 0
IC903 C0CBCAB00006 (REG.3V)
VIN
VOUT
THERMAL PROTECTION
BANDGAP REFERENCE
CONTROL
GND
NOISE BYPASS
C926 0.1
C902 6V10
R912 1K
R913 1K
Q912 B1ADBE000001 (POWER SUPPLY)
R952 47K
R955 47K
R956 0
Q913 XP1501 (POWER SUPPLY CONT.)
R953 3300
C922 1
R954 15K
R957 18K
Q914 B1ADGD000005 (POWER SUPPLY)
R959 47K
C925 1
R960 100K
R961 82K
R962 220K
C923 10
Q915 2SD2216J0L (POWER SUPPLY CONT.)
C921 1
C910 1
R909 0
R910 0
R911 0
C904 0.1
C905 0.1
C906 0.1
R926 1K
R920 100
R921 100
R922 100
IC901 AN12530A-VT (MONITOR LCD CONTROL/PROCESSOR)
HMC
VMC
CKV2
CKV1
VSS
TESTIN
EXTDA
EXT DA
LOAD
SCLK
SDATA
VDD
VCC1
GND
VSYNC
HSYNC
LPFADJ
LATCH
SHIFT-RES
DEC
FILTER BIAS
R919 68K
H COUN
BGP POS
PLL COUN
SYNC SEP
LPF
CLAMP
RIN
GIN
BIN
VCC2

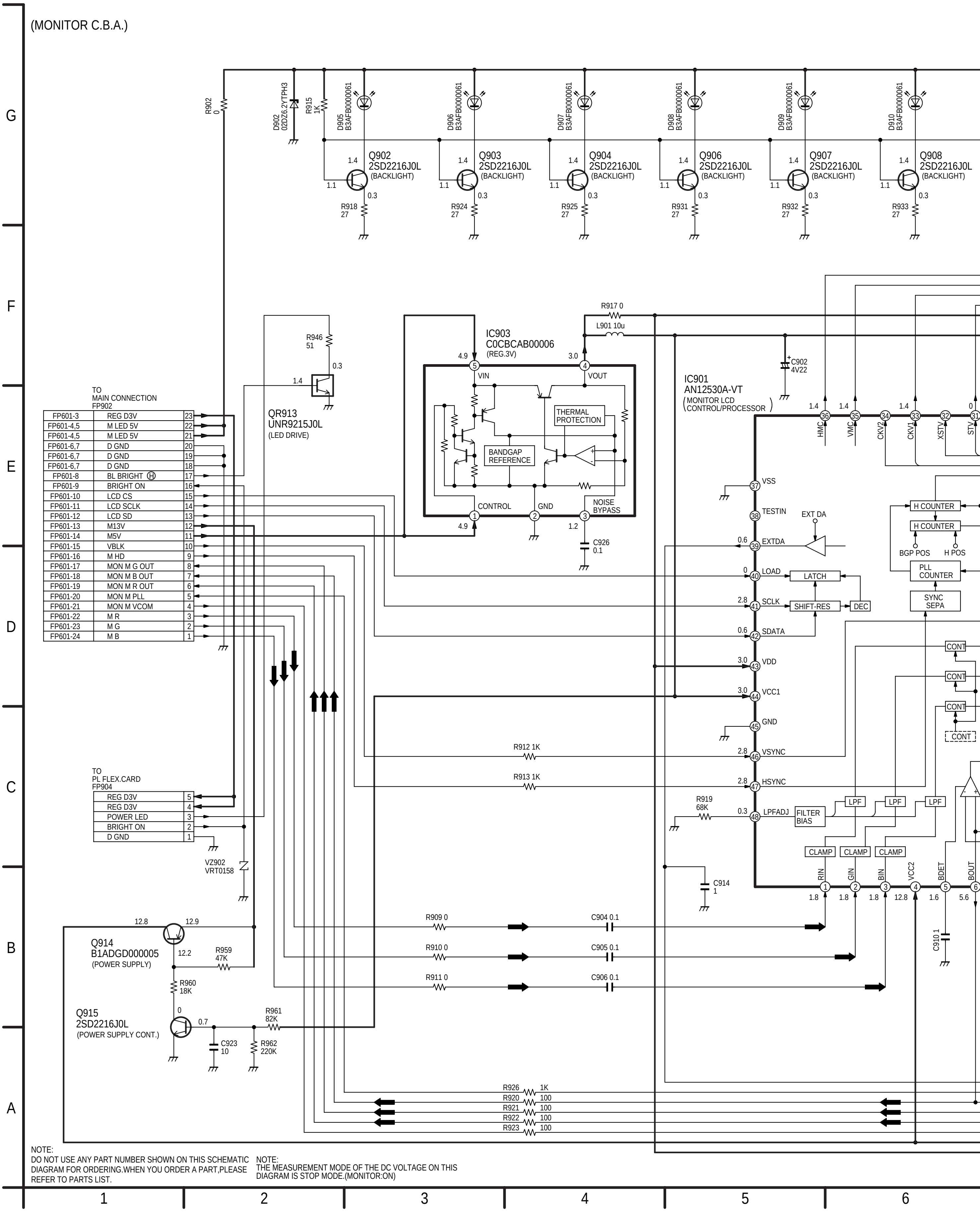
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.(MONITOR:ON)


:VIDEO MAIN SIGNAL PATH
D910 B3AFB0000061
D911 B3AFB0000061
D912 B3AFB0000061
D913 B3AFB0000061
Q908 2SD2216J0L (BACKLIGHT)
Q909 2SD2216J0L (BACKLIGHT)
Q910 2SD2216J0L (BACKLIGHT)
Q911 2SD2216J0L (BACKLIGHT)
Q916 B1ADBE000001 (BACKLIGHT ON/OFF)
R933 27
R934 27
R935 27
R936 27
R923 10K
R928 33K
R930 33K
R947 33K
QR902 UN9214J (LCD DRIVE)
QR906 UN9214J (LCD DRIVE)
QR907 B1GDBEHH0001 (LCD DRIVE)
C920 1
TO MONITOR PANEL FP901
24 COM
23 HVDD
22 CKH1
21 CKH2
20 STH
19 XSTH
18 CSH
17 PCG
16 XPCG
15 HVSS
14 G
13 R
12 B
11 PCD
10 XENB
9 ENB
8 CSV
7 XSTV
6 STV
5 VVDD
4 CKV2
3 CKV1
2 VVSS
1 COM
C901 0.01
R901 15K
C903 1
R903 6800
VMC
CKV2
CKV1
XSTV
STV
VCC3
VCC4
AFC
FOADJ
GND4
VSS
PH-DET
VCO
DIV
H COUNTER
H COUNTER
BGP POS
H POS
1/2 DIV
V COUNTER
V DECODER
V POS
PLL COUNTER
SYNC SEPA
SUB BRI
DEC
RGB AMP
CONT
CLAMP
INV
SUB BRI
CONT
VCC3
PWM
XSTH
STH
CKH2
CKH1
XENB
ENB
XPCG
PCG
VCOM
PCD
COM
LPF
CLAMP
GIN
BIN
VCC2
BDET
BOUT
GDET
GOUT
RDET
R OUT
D VREF1
GND2
C910 1
C911 1
C912 1
C913 1
R940 220
R941 10K
R939 10K
C919 1
Q901 XP4654 (LCD DRIVE)
Q905 XP4654 (LCD DRIVE)
R949 10K
R948 10K
R905 0
R906 0
R907 0
6
7
8
9
10
11

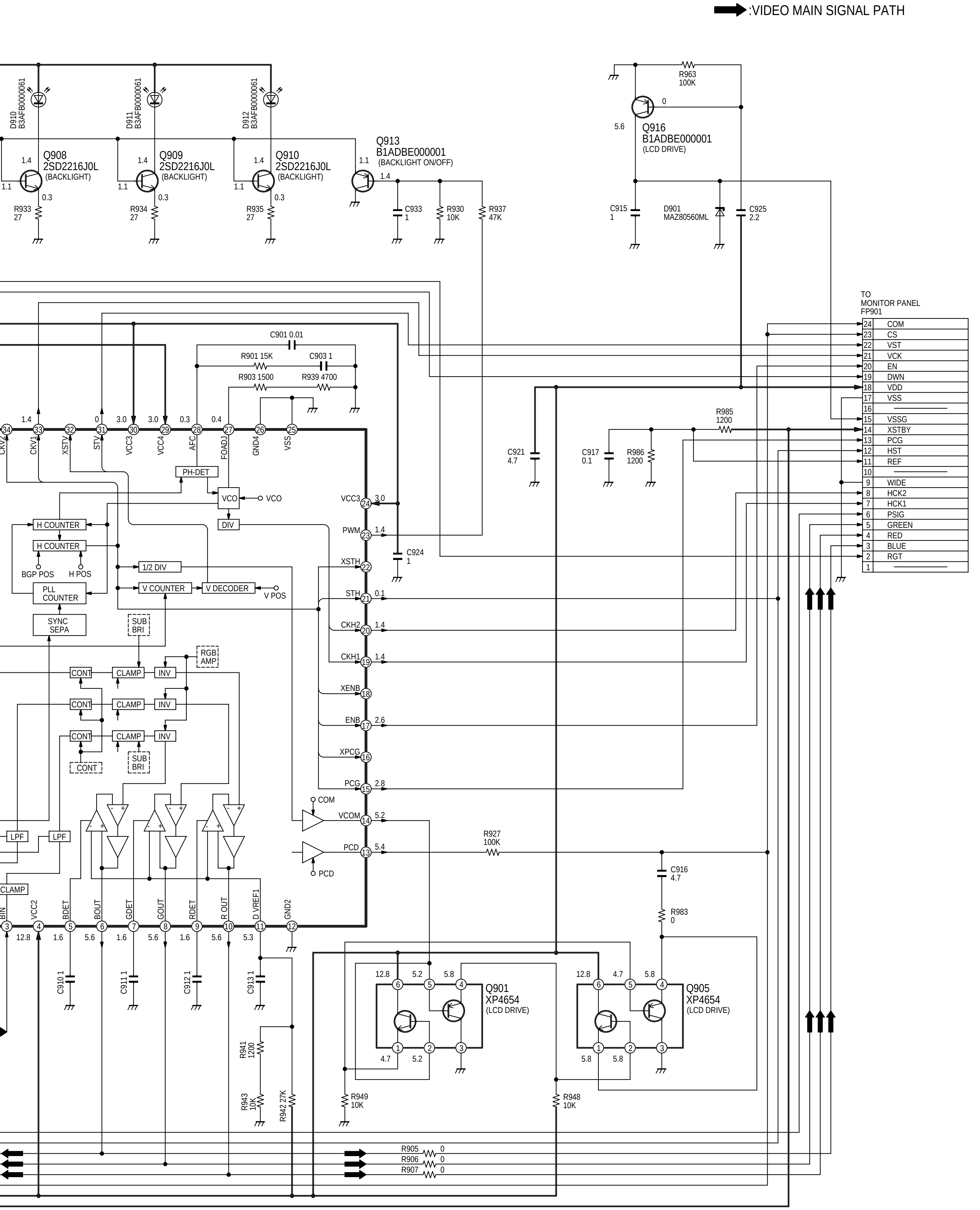
NV-GS200GD,GS120GD
MONITOR SCHEMATIC DIAGRAM
(NV-GS120GD ONLY)

12.15. MONITOR SCHEMATIC DIAGRAM (NV-GS200GD ONLY)


(MONITOR C.B.A.)
G
F
E
D
C
B
A
1
2
3
4
5
6
R902 0
D902 02DZ6.2YTPH3
R915 1K
D905 B3AFB0000061
D906 B3AFB0000061
D907 B3AFB0000061
D908 B3AFB0000061
D909 B3AFB0000061
D910 B3AFB0000061
Q902 2SD2216J0L (BACKLIGHT)
Q903 2SD2216J0L (BACKLIGHT)
Q904 2SD2216J0L (BACKLIGHT)
Q906 2SD2216J0L (BACKLIGHT)
Q907 2SD2216J0L (BACKLIGHT)
Q908 2SD2216J0L (BACKLIGHT)
1.4
1.1
0.3
R918 27
R924 27
R925 27
R931 27
R932 27
R933 27
R917 0
L901 10u
R946 51
0.3
1.4
IC903 C0CBCAB00006 (REG.3V)
4.9
3.0
VIN
VOUT
THERMAL PROTECTION
BANDGAP REFERENCE
CONTROL
GND
NOISE BYPASS
4.9
1.2
C926 0.1
C902 4V22
IC901 AN12530A-VT (MONITOR LCD CONTROL/PROCESSOR)
QR913 UNR9215J0L (LED DRIVE)
TO MAIN CONNECTION FP902
FP601-3 REG D3V 23
FP601-4,5 M LED 5V 22
FP601-4,5 M LED 5V 21
FP601-6,7 D GND 20
FP601-6,7 D GND 19
FP601-6,7 D GND 18
FP601-8 BL BRIGHT Ⓗ 17
FP601-9 BRIGHT ON 16
FP601-10 LCD CS 15
FP601-11 LCD SCLK 14
FP601-12 LCD SD 13
FP601-13 M13V 12
FP601-14 M5V 11
FP601-15 VBLK 10
FP601-16 M HD 9
FP601-17 MON M G OUT 8
FP601-18 MON M B OUT 7
FP601-19 MON M R OUT 6
FP601-20 MON M PLL 5
FP601-21 MON M VCOM 4
FP601-22 M R 3
FP601-23 M G 2
FP601-24 M B 1
TO PL FLEX.CARD FP904
REG D3V 5
REG D3V 4
POWER LED 3
BRIGHT ON 2
D GND 1
VZ902 VRT0158
1.4 1.4 1.4 0
36 HMC
35 VMC
34 CKV2
33 CKV1
32 XSTV
31 STV
37 VSS
38 TESTIN
EXT DA
0.6 39 EXTDA
0 40 LOAD
LATCH
2.8 41 SCLK
SHIFT-RES
DEC
0.6 42 SDATA
3.0 43 VDD
3.0 44 VCC1
45 GND
2.8 46 VSYNC
2.8 47 HSYNC
0.3 48 LPFADJ
H COUNTER
H COUNTER
BGP POS
H POS
PLL COUNTER
SYNC SEPA
CONT
CONT
CONT
CONT
R912 1K
R913 1K
R919 68K
FILTER BIAS
LPF
LPF
LPF
CLAMP
CLAMP
CLAMP
C914 1
RIN 1 1.8
GIN 2 1.8
BIN 3 1.8
VCC2 4 12.8
BDET 5 1.6
BOUT 6 5.6
C910 1
12.8
12.9
Q914 B1ADGD000005 (POWER SUPPLY)
12.2
R959 47K
R960 18K
Q915 2SD2216J0L (POWER SUPPLY CONT.)
0
0.7
R961 82K
C923 10
R962 220K
R909 0
R910 0
R911 0
C904 0.1
C905 0.1
C906 0.1
R926 1K
R920 100
R921 100
R922 100
R923 100

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

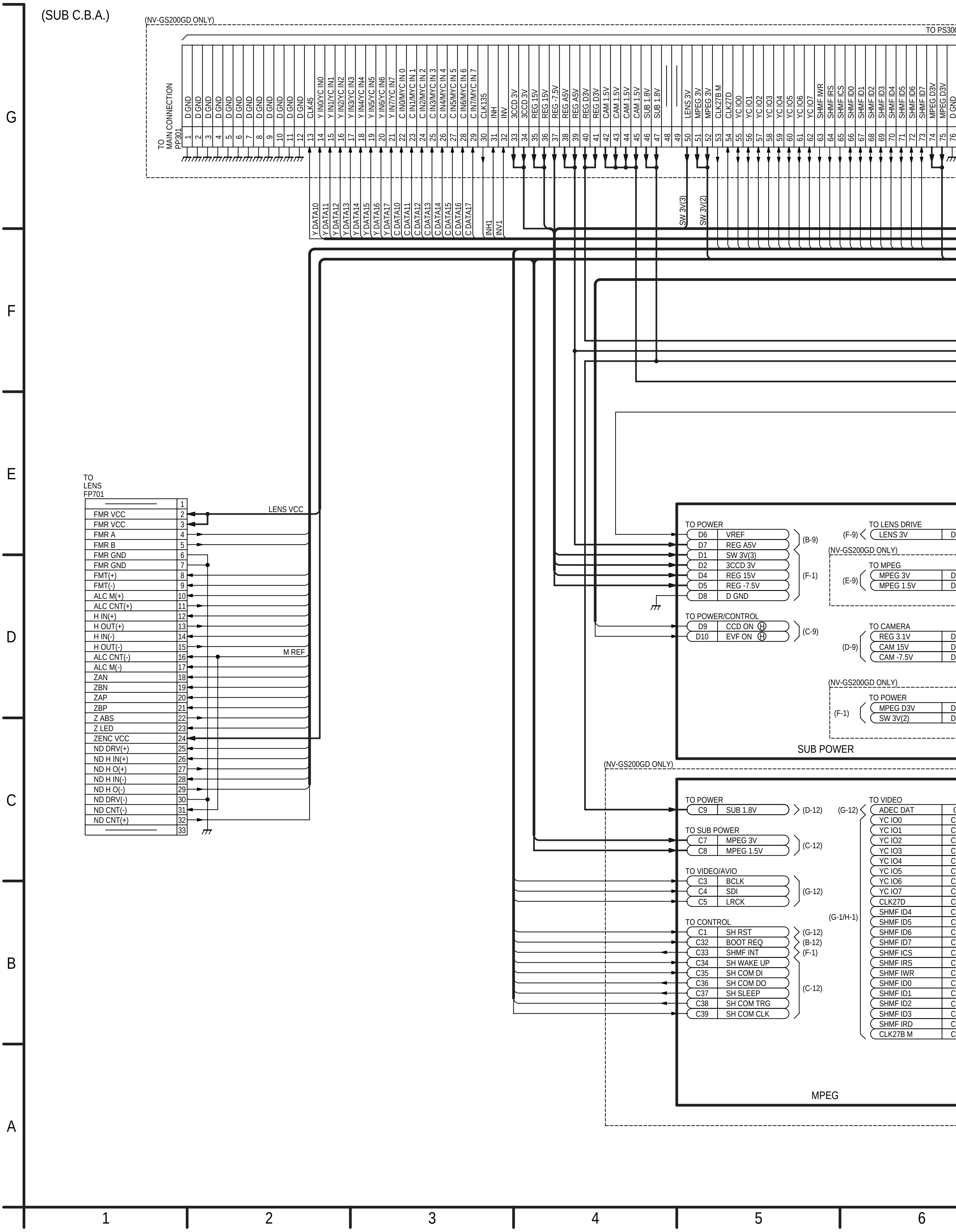
NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.(MONITOR:ON)


:VIDEO MAIN SIGNAL PATH
D910 B3AFB0000061
D911 B3AFB0000061
D912 B3AFB0000061
Q908 2SD2216J0L (BACKLIGHT)
Q909 2SD2216J0L (BACKLIGHT)
Q910 2SD2216J0L (BACKLIGHT)
Q913 B1ADBE000001 (BACKLIGHT ON/OFF)
R933 27
R934 27
R935 27
C933 1
R930 10K
R937 47K
R963 100K
Q916 B1ADBE000001 (LCD DRIVE)
C915 1
D901 MAZ80560ML
C925 2.2
TO MONITOR PANEL FP901
24 COM
23 CS
22 VST
21 VCK
20 EN
19 DWN
18 VDD
17 VSS
16
15 VSSG
14 XSTBY
13 PCG
12 HST
11 REF
10
9 WIDE
8 HCK2
7 HCK1
6 PSIG
5 GREEN
4 RED
3 BLUE
2 RGT
1
C901 0.01
R901 15K
C903 1
R903 1500
R939 4700
R985 1200
C921 4.7
C917 0.1
R986 1200
CKV2
CKV1
XSTV
STV
VCC3
VCC4
AFC
FOADJ
GND4
VSS
PH-DET
VCO
DIV
H COUNTER
H COUNTER
BGP POS
H POS
PLL COUNTER
1/2 DIV
V COUNTER
V DECODER
V POS
SYNC SEPA
SUB BRI
RGB AMP
CONT
CLAMP
INV
LPF
VCC3
PWM
XSTH
STH
CKH2
CKH1
XENB
ENB
XPCG
PCG
VCOM
PCD
COM
C924 1
R927 100K
C916 4.7
R983 0
BIN
VCC2
BDET
BOUT
GDET
GOUT
RDET
R OUT
D VREF1
GND2
C910 1
C911 1
C912 1
C913 1
R941 1200
R943 10K
R942 27K
Q901 XP4654 (LCD DRIVE)
Q905 XP4654 (LCD DRIVE)
R949 10K
R948 10K
R905 0
R906 0
R907 0

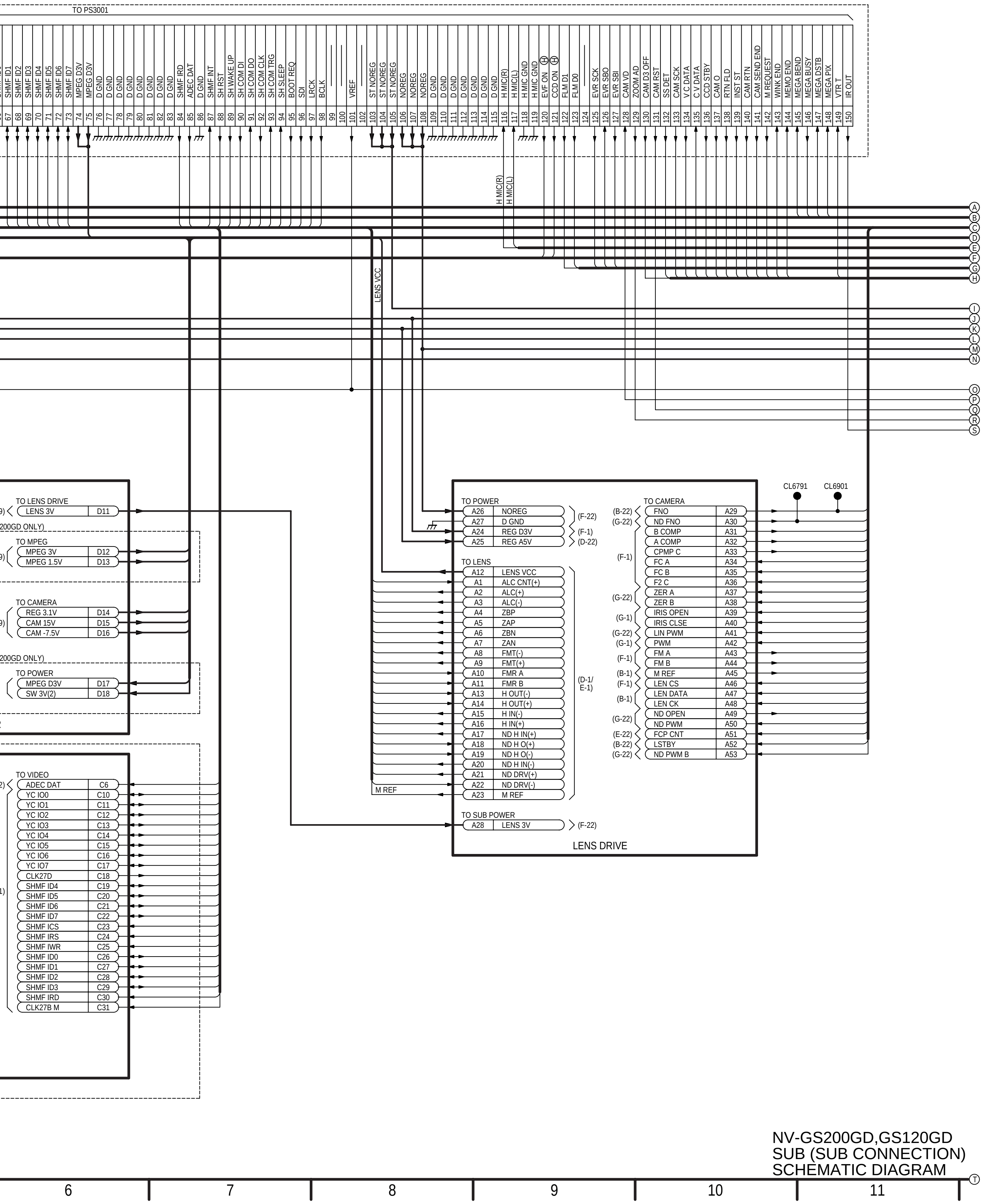
NV-GS200GD,GS120GD
MONITOR SCHEMATIC DIAGRAM(NV-GS200GD ONLY)

6 7 8 9 10 11

12.16. SUB (SUB CONNECTION) SCHEMATIC DIAGRAM

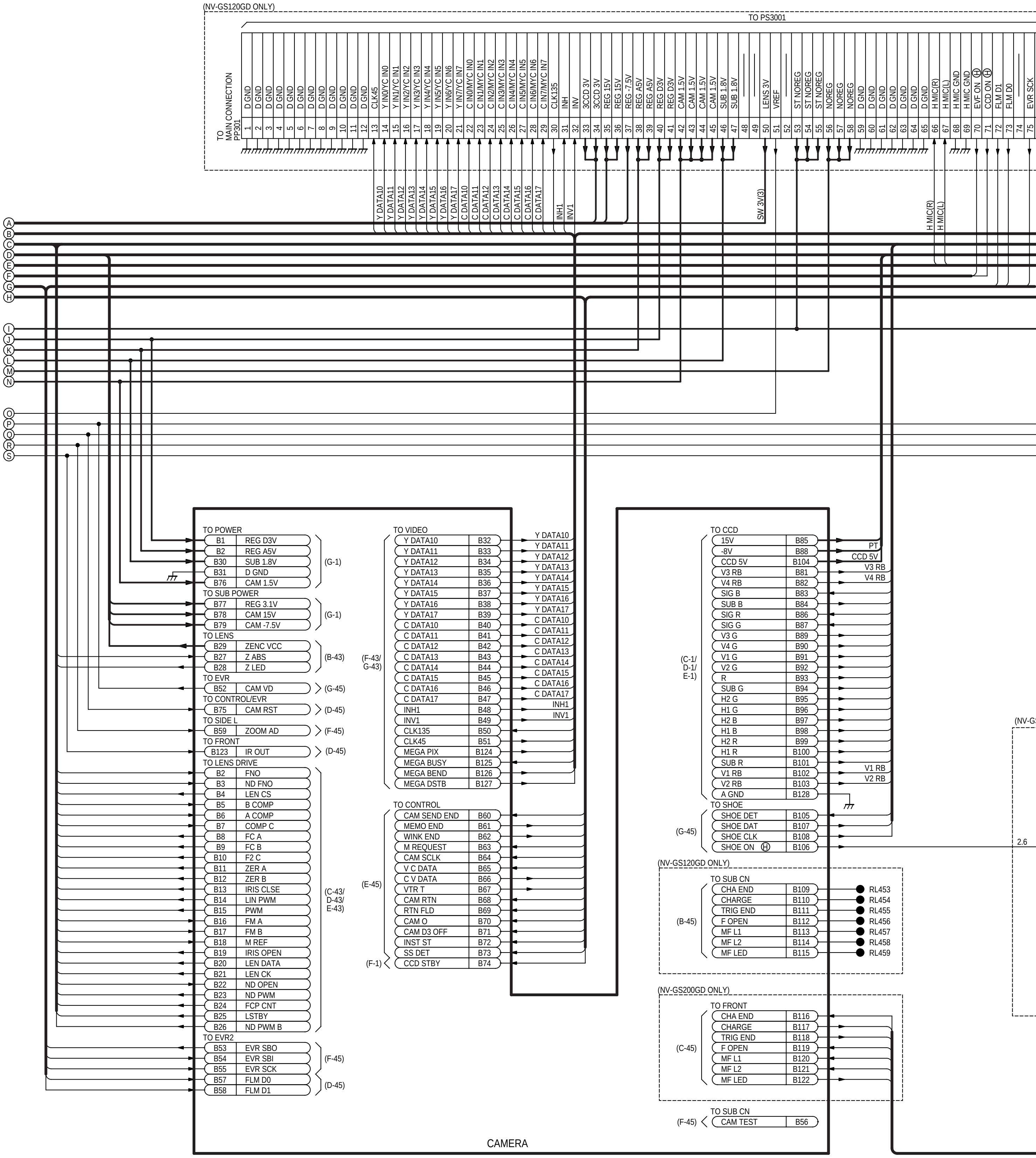


(SUB C.B.A.)
(NV-GS200GD ONLY)
TO PS300
TO MAIN CONNECTION PP301
1 D GND
2 D GND
3 D GND
4 D GND
5 D GND
6 D GND
7 D GND
8 D GND
9 D GND
10 D GND
11 D GND
12 D GND
13 CLK45
14 Y IN0/YC IN0
15 Y IN1/YC IN1
16 Y IN2/YC IN2
17 Y IN3/YC IN3
18 Y IN4/YC IN4
19 Y IN5/YC IN5
20 Y IN6/YC IN6
21 Y IN7/YC IN7
22 C IN0/MYC IN 0
23 C IN1/MYC IN 1
24 C IN2/MYC IN 2
25 C IN3/MYC IN 3
26 C IN4/MYC IN 4
27 C IN5/MYC IN 5
28 C IN6/MYC IN 6
29 C IN7/MYC IN 7
30 CLK135
31 INH
32 INV
33 3CCD 3V
34 3CCD 3V
35 REG 15V
36 REG 15V
37 REG -7.5V
38 REG A5V
39 REG A5V
40 REG D3V
41 REG D3V
42 CAM 1.5V
43 CAM 1.5V
44 CAM 1.5V
45 CAM 1.5V
46 SUB 1.8V
47 SUB 1.8V
48
49
50 LENS 3V
51 MPEG 3V
52 MPEG 3V
53 CLK27B M
54 CLK27D
55 YC IO0
56 YC IO1
57 YC IO2
58 YC IO3
59 YC IO4
60 YC IO5
61 YC IO6
62 YC IO7
63 SHMF IWR
64 SHMF IRS
65 SHMF ICS
66 SHMF ID0
67 SHMF ID1
68 SHMF ID2
69 SHMF ID3
70 SHMF ID4
71 SHMF ID5
72 SHMF ID6
73 SHMF ID7
74 MPEG D3V
75 MPEG D3V
76 D GND
Y DATA10
Y DATA11
Y DATA12
Y DATA13
Y DATA14
Y DATA15
Y DATA16
Y DATA17
C DATA10
C DATA11
C DATA12
C DATA13
C DATA14
C DATA15
C DATA16
C DATA17
INH1
INV1
SW 3V(3)
SW 3V(2)
TO LENS FP701
1
2 FMR VCC
3 FMR VCC
4 FMR A
5 FMR B
6 FMR GND
7 FMR GND
8 FMT(+)
9 FMT(-)
10 ALC M(+)
11 ALC CNT(+)
12 H IN(+)
13 H OUT(+)
14 H IN(-)
15 H OUT(-)
16 ALC CNT(-)
17 ALC M(-)
18 ZAN
19 ZBN
20 ZAP
21 ZBP
22 Z ABS
23 Z LED
24 ZENC VCC
25 ND DRV(+)
26 ND H IN(+)
27 ND H O(+)
28 ND H IN(-)
29 ND H O(-)
30 ND DRV(-)
31 ND CNT(-)
32 ND CNT(+)
33
LENS VCC
M REF
TO POWER
D6 VREF
D7 REG A5V
D1 SW 3V(3)
D2 3CCD 3V
D4 REG 15V
D5 REG -7.5V
D8 D GND
(B-9)
(F-1)
TO POWER/CONTROL
D9 CCD ON Ⓗ
D10 EVF ON Ⓗ
(C-9)
TO LENS DRIVE
(F-9) LENS 3V
(NV-GS200GD ONLY)
TO MPEG
(E-9) MPEG 3V
MPEG 1.5V
TO CAMERA
(D-9) REG 3.1V
CAM 15V
CAM -7.5V
(NV-GS200GD ONLY)
TO POWER
(F-1) MPEG D3V
SW 3V(2)
SUB POWER
(NV-GS200GD ONLY)
TO POWER
C9 SUB 1.8V
(D-12)
TO SUB POWER
C7 MPEG 3V
C8 MPEG 1.5V
(C-12)
TO VIDEO/AVIO
C3 BCLK
C4 SDI
C5 LRCK
(G-12)
TO CONTROL
C1 SH RST
C32 BOOT REQ
C33 SHMF INT
C34 SH WAKE UP
C35 SH COM DI
C36 SH COM DO
C37 SH SLEEP
C38 SH COM TRG
C39 SH COM CLK
(G-12)
(B-12)
(F-1)
(C-12)
TO VIDEO
(G-12) ADEC DAT
YC IO0
YC IO1
YC IO2
YC IO3
YC IO4
YC IO5
YC IO6
YC IO7
CLK27D
(G-1/H-1) SHMF ID4
SHMF ID5
SHMF ID6
SHMF ID7
SHMF ICS
SHMF IRS
SHMF IWR
SHMF ID0
SHMF ID1
SHMF ID2
SHMF ID3
SHMF IRD
CLK27B M
MPEG
G
F
E
D
C
B
A
1
2
3
4
5
6



TO PS3001
67 SHMF ID1
68 SHMF ID2
69 SHMF ID3
70 SHMF ID4
71 SHMF ID5
72 SHMF ID6
73 SHMF ID7
74 MPEG D3V
75 MPEG D3V
76 D GND
77 D GND
78 D GND
79 D GND
80 D GND
81 D GND
82 D GND
83 D GND
84 SHMF IRD
85 ADEC DAT
86 D GND
87 SHMF INT
88 SH RST
89 SH WAKE UP
90 SH COM DI
91 SH COM DO
92 SH COM CLK
93 SH COM TRG
94 SH SLEEP
95 BOOT REQ
96 SDI
97 LRCK
98 BCLK
99
100
101 VREF
102
103 ST NOREG
104 ST NOREG
105 ST NOREG
106 NOREG
107 NOREG
108 NOREG
109 D GND
110 D GND
111 D GND
112 D GND
113 D GND
114 D GND
115 D GND
116 H MIC(R)
117 H MIC(L)
118 H MIC GND
119 H MIC GND
120 EVF ON H
121 CCD ON H
122 FLM D1
123 FLM D0
124
125 EVR SCK
126 EVR SBO
127 EVR SBI
128 CAM VD
129 ZOOM AD
130 CAM D3 OFF
131 CAM RST
132 SS DET
133 CAM SCK
134 V C DATA
135 C V DATA
136 CCD STBY
137 CAM O
138 RTN FLD
139 INST ST
140 CAM RTN
141 CAM SEND END
142 M REQUEST
143 WINK END
144 MEMO END
145 MEGA BEND
146 MEGA BUSY
147 MEGA DSTB
148 MEGA PIX
149 VTR T
150 IR OUT
H MIC(R)
H MIC(L)
LENS VCC
A B C D E F G H
I J K L M N
O P Q R S
TO LENS DRIVE
LENS 3V D11
200GD ONLY)
TO MPEG
MPEG 3V D12
MPEG 1.5V D13
TO CAMERA
REG 3.1V D14
CAM 15V D15
CAM -7.5V D16
200GD ONLY)
TO POWER
MPEG D3V D17
SW 3V(2) D18
TO VIDEO
ADEC DAT C6
YC IO0 C10
YC IO1 C11
YC IO2 C12
YC IO3 C13
YC IO4 C14
YC IO5 C15
YC IO6 C16
YC IO7 C17
CLK27D C18
SHMF ID4 C19
SHMF ID5 C20
SHMF ID6 C21
SHMF ID7 C22
SHMF ICS C23
SHMF IRS C24
SHMF IWR C25
SHMF ID0 C26
SHMF ID1 C27
SHMF ID2 C28
SHMF ID3 C29
SHMF IRD C30
CLK27B M C31
TO POWER
A26 NOREG
A27 D GND
A24 REG D3V
A25 REG A5V
(F-22)
(F-1)
(D-22)
TO LENS
A12 LENS VCC
A1 ALC CNT(+)
A2 ALC(+)
A3 ALC(-)
A4 ZBP
A5 ZAP
A6 ZBN
A7 ZAN
A8 FMT(-)
A9 FMT(+)
A10 FMR A
A11 FMR B
A13 H OUT(-)
A14 H OUT(+)
A15 H IN(-)
A16 H IN(+)
A17 ND H IN(+)
A18 ND H O(+)
A19 ND H O(-)
A20 ND H IN(-)
A21 ND DRV(+)
A22 ND DRV(-)
A23 M REF
(D-1/ E-1)
M REF
TO SUB POWER
A28 LENS 3V
(F-22)
TO CAMERA
CL6791
CL6901
(B-22) FNO A29
(G-22) ND FNO A30
B COMP A31
A COMP A32
CPMP C A33
(F-1) FC A A34
FC B A35
F2 C A36
(G-22) ZER A A37
ZER B A38
(G-1) IRIS OPEN A39
IRIS CLSE A40
(G-22) LIN PWM A41
(G-1) PWM A42
(F-1) FM A A43
FM B A44
(B-1) M REF A45
(F-1) LEN CS A46
(B-1) LEN DATA A47
LEN CK A48
(G-22) ND OPEN A49
ND PWM A50
(E-22) FCP CNT A51
(B-22) LSTBY A52
(G-22) ND PWM B A53
LENS DRIVE
6
7
8
9
10
11
T

NV-GS200GD,GS120GD
SUB (SUB CONNECTION)
SCHEMATIC DIAGRAM

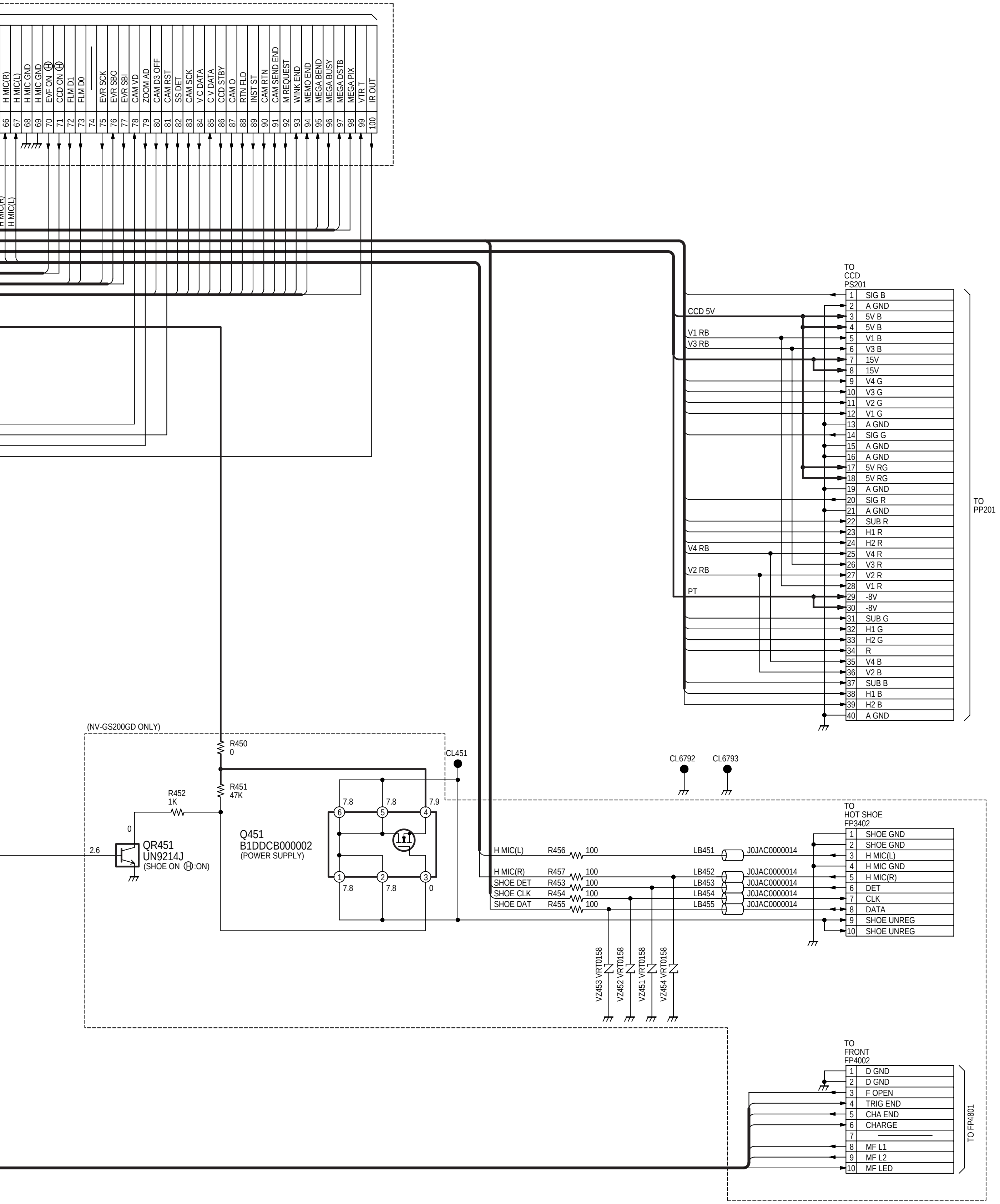

(NV-GS120GD ONLY)
TO PS3001
TO MAIN CONNECTION PP301
1 D GND
2 D GND
3 D GND
4 D GND
5 D GND
6 D GND
7 D GND
8 D GND
9 D GND
10 D GND
11 D GND
12 D GND
13 CLK45
14 Y IN0/YC IN0
15 Y IN1/YC IN1
16 Y IN2/YC IN2
17 Y IN3/YC IN3
18 Y IN4/YC IN4
19 Y IN5/YC IN5
20 Y IN6/YC IN6
21 Y IN7/YC IN7
22 C IN0/MYC IN0
23 C IN1/MYC IN1
24 C IN2/MYC IN2
25 C IN3/MYC IN3
26 C IN4/MYC IN4
27 C IN5/MYC IN5
28 C IN6/MYC IN6
29 C IN7/MYC IN7
30 CLK135
31 INH
32 INV
33 3CCD 3V
34 3CCD 3V
35 REG 15V
36 REG 15V
37 REG -7.5V
38 REG A5V
39 REG A5V
40 REG D3V
41 REG D3V
42 CAM 1.5V
43 CAM 1.5V
44 CAM 1.5V
45 CAM 1.5V
46 SUB 1.8V
47 SUB 1.8V
48
49
50 LENS 3V
51 VREF
52
53 ST NOREG
54 ST NOREG
55 ST NOREG
56 NOREG
57 NOREG
58 NOREG
59 D GND
60 D GND
61 D GND
62 D GND
63 D GND
64 D GND
65 D GND
66 H MIC(R)
67 H MIC(L)
68 H MIC GND
69 H MIC GND
70 EVF ON Ⓗ
71 CCD ON Ⓗ
72 FLM D1
73 FLM D0
74
75 EVR SCK
Y DATA10
Y DATA11
Y DATA12
Y DATA13
Y DATA14
Y DATA15
Y DATA16
Y DATA17
C DATA10
C DATA11
C DATA12
C DATA13
C DATA14
C DATA15
C DATA16
C DATA17
INH1
INV1
SW 3V(3)
H MIC(R)
H MIC(L)
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
TO POWER
B1 REG D3V
B2 REG A5V
B30 SUB 1.8V
B31 D GND
B76 CAM 1.5V
(G-1)
TO SUB POWER
B77 REG 3.1V
B78 CAM 15V
B79 CAM -7.5V
(G-1)
TO LENS
B29 ZENC VCC
B27 Z ABS
B28 Z LED
(B-43)
TO EVR
B52 CAM VD
(G-45)
TO CONTROL/EVR
B75 CAM RST
(D-45)
TO SIDE L
B59 ZOOM AD
(F-45)
TO FRONT
B123 IR OUT
(D-45)
TO LENS DRIVE
B2 FNO
B3 ND FNO
B4 LEN CS
B5 B COMP
B6 A COMP
B7 COMP C
B8 FC A
B9 FC B
B10 F2 C
B11 ZER A
B12 ZER B
B13 IRIS CLSE
B14 LIN PWM
B15 PWM
B16 FM A
B17 FM B
B18 M REF
B19 IRIS OPEN
B20 LEN DATA
B21 LEN CK
B22 ND OPEN
B23 ND PWM
B24 FCP CNT
B25 LSTBY
B26 ND PWM B
(C-43/ D-43/ E-43)
TO EVR2
B53 EVR SBO
B54 EVR SBI
B55 EVR SCK
B57 FLM D0
B58 FLM D1
(F-45)
(D-45)
TO VIDEO
Y DATA10 B32
Y DATA11 B33
Y DATA12 B34
Y DATA13 B35
Y DATA14 B36
Y DATA15 B37
Y DATA16 B38
Y DATA17 B39
C DATA10 B40
C DATA11 B41
C DATA12 B42
C DATA13 B43
C DATA14 B44
C DATA15 B45
C DATA16 B46
C DATA17 B47
INH1 B48
INV1 B49
CLK135 B50
CLK45 B51
MEGA PIX B124
MEGA BUSY B125
MEGA BEND B126
MEGA DSTB B127
(F-43/ G-43)
Y DATA10
Y DATA11
Y DATA12
Y DATA13
Y DATA14
Y DATA15
Y DATA16
Y DATA17
C DATA10
C DATA11
C DATA12
C DATA13
C DATA14
C DATA15
C DATA16
C DATA17
INH1
INV1
TO CONTROL
CAM SEND END B60
MEMO END B61
WINK END B62
M REQUEST B63
CAM SCLK B64
V C DATA B65
C V DATA B66
VTR T B67
CAM RTN B68
RTN FLD B69
CAM O B70
CAM D3 OFF B71
INST ST B72
SS DET B73
CCD STBY B74
(E-45)
(F-1)
TO CCD
15V B85
-8V B88
CCD 5V B104
V3 RB B81
V4 RB B82
SIG B B83
SUB B B84
SIG R B86
SIG G B87
V3 G B89
V4 G B90
V1 G B91
V2 G B92
R B93
SUB G B94
H2 G B95
H1 G B96
H2 B B97
H1 B B98
H2 R B99
H1 R B100
SUB R B101
V1 RB B102
V2 RB B103
A GND B128
(C-1/ D-1/ E-1)
PT
CCD 5V
V3 RB
V4 RB
V1 RB
V2 RB
TO SHOE
SHOE DET B105
SHOE DAT B107
SHOE CLK B108
SHOE ON Ⓗ B106
(G-45)
2.6
(NV-GS120GD ONLY)
TO SUB CN
CHA END B109
CHARGE B110
TRIG END B111
F OPEN B112
MF L1 B113
MF L2 B114
MF LED B115
(B-45)
RL453
RL454
RL455
RL456
RL457
RL458
RL459
(NV-GS200GD ONLY)
TO FRONT
CHA END B116
CHARGE B117
TRIG END B118
F OPEN B119
MF L1 B120
MF L2 B121
MF LED B122
(C-45)
TO SUB CN
CAM TEST B56
(F-45)
CAMERA
(NV-GS

NV-GS200GD,GS120GD
SUB (SUB CONNECTION)
SCHEMATIC DIAGRAM

NOTE:
DO NOT USE ANY PART NUMBER
DIAGRAM FOR ORDERING.WHEN
REFER TO PARTS LIST.

T

12 13 14 15 16 17


66 H MIC(R)
67 H MIC(L)
68 H MIC GND
69 H MIC GND
70 EVF ON Ⓗ
71 CCD ON Ⓗ
72 FLM D1
73 FLM D0
74
75 EVR SCK
76 EVR SBO
77 EVR SBI
78 CAM VD
79 ZOOM AD
80 CAM D3 OFF
81 CAM RST
82 SS DET
83 CAM SCK
84 V C DATA
85 C V DATA
86 CCD STBY
87 CAM O
88 RTN FLD
89 INST ST
90 CAM RTN
91 CAM SEND END
92 M REQUEST
93 WINK END
94 MEMO END
95 MEGA BEND
96 MEGA BUSY
97 MEGA DSTB
98 MEGA PIX
99 VTR T
100 IR OUT
H MIC(R)
H MIC(L)
CCD 5V
V1 RB
V3 RB
V4 RB
V2 RB
PT
TO
CCD
PS201
1 SIG B
2 A GND
3 5V B
4 5V B
5 V1 B
6 V3 B
7 15V
8 15V
9 V4 G
10 V3 G
11 V2 G
12 V1 G
13 A GND
14 SIG G
15 A GND
16 A GND
17 5V RG
18 5V RG
19 A GND
20 SIG R
21 A GND
22 SUB R
23 H1 R
24 H2 R
25 V4 R
26 V3 R
27 V2 R
28 V1 R
29 -8V
30 -8V
31 SUB G
32 H1 G
33 H2 G
34 R
35 V4 B
36 V2 B
37 SUB B
38 H1 B
39 H2 B
40 A GND
TO
PP201
(NV-GS200GD ONLY)
R450
0
R451
47K
R452
1K
CL451
CL6792
CL6793
0
2.6
QR451
UN9214J
(SHOE ON Ⓗ:ON)
Q451
B1DDCB000002
(POWER SUPPLY)
7.8
7.8
7.9
7.8
7.8
0
H MIC(L)
R456
100
H MIC(R)
R457
100
SHOE DET
R453
100
SHOE CLK
R454
100
SHOE DAT
R455
100
LB451
LB452
LB453
LB454
LB455
J0JAC0000014
J0JAC0000014
J0JAC0000014
J0JAC0000014
J0JAC0000014
VZ453 VRT0158
VZ452 VRT0158
VZ451 VRT0158
VZ454 VRT0158
TO
HOT SHOE
FP3402
1 SHOE GND
2 SHOE GND
3 H MIC(L)
4 H MIC GND
5 H MIC(R)
6 DET
7 CLK
8 DATA
9 SHOE UNREG
10 SHOE UNREG
TO
FRONT
FP4002
1 D GND
2 D GND
3 F OPEN
4 TRIG END
5 CHA END
6 CHARGE
7
8 MF L1
9 MF L2
10 MF LED
TO FP4801

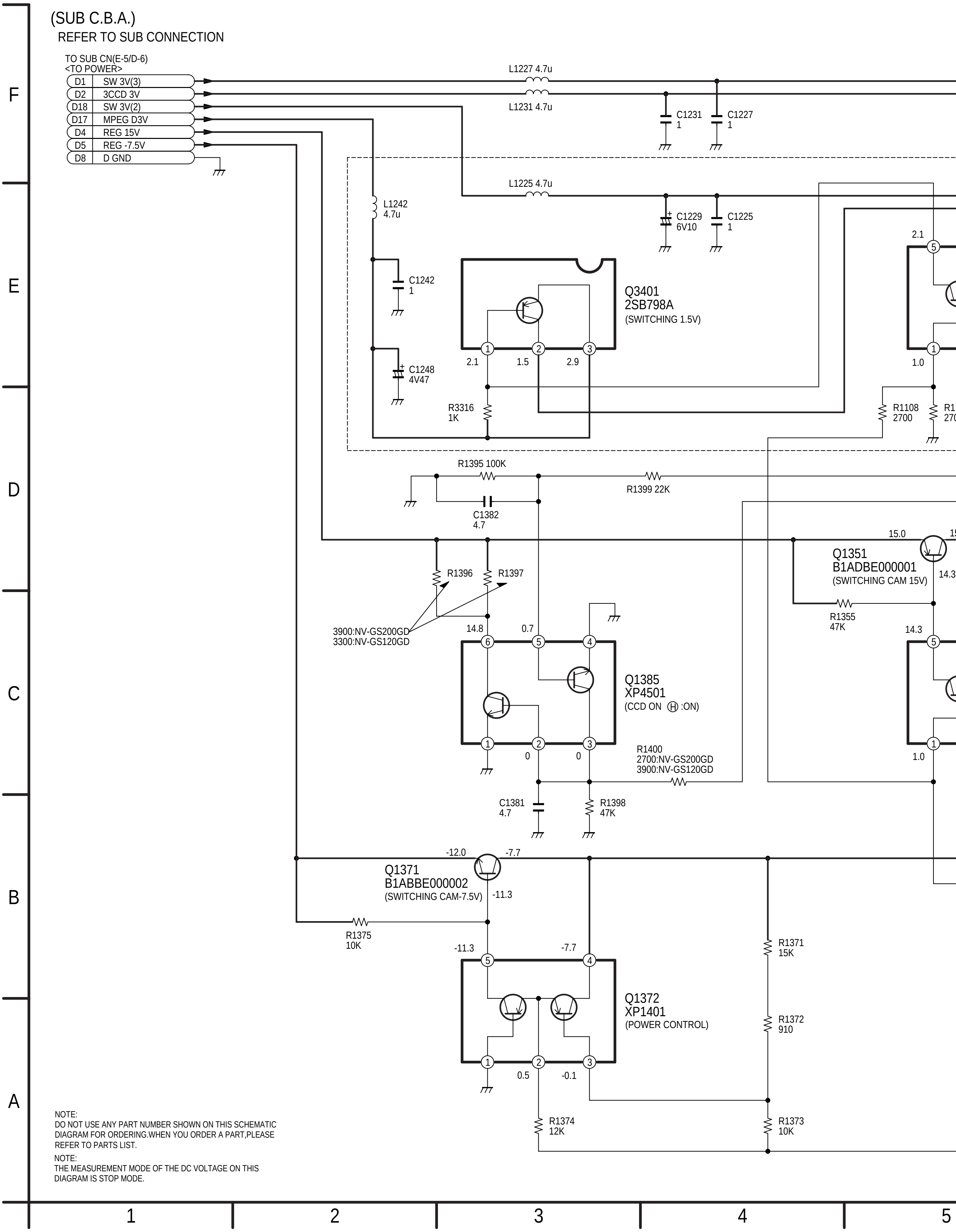
TE:
NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC
GRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE
FER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS
DIAGRAM IS STOP MODE.(SHOE:ON)

NV-GS200GD,GS120GD
SUB (SUB CONNECTION) SCHEMATIC DIAGRAM

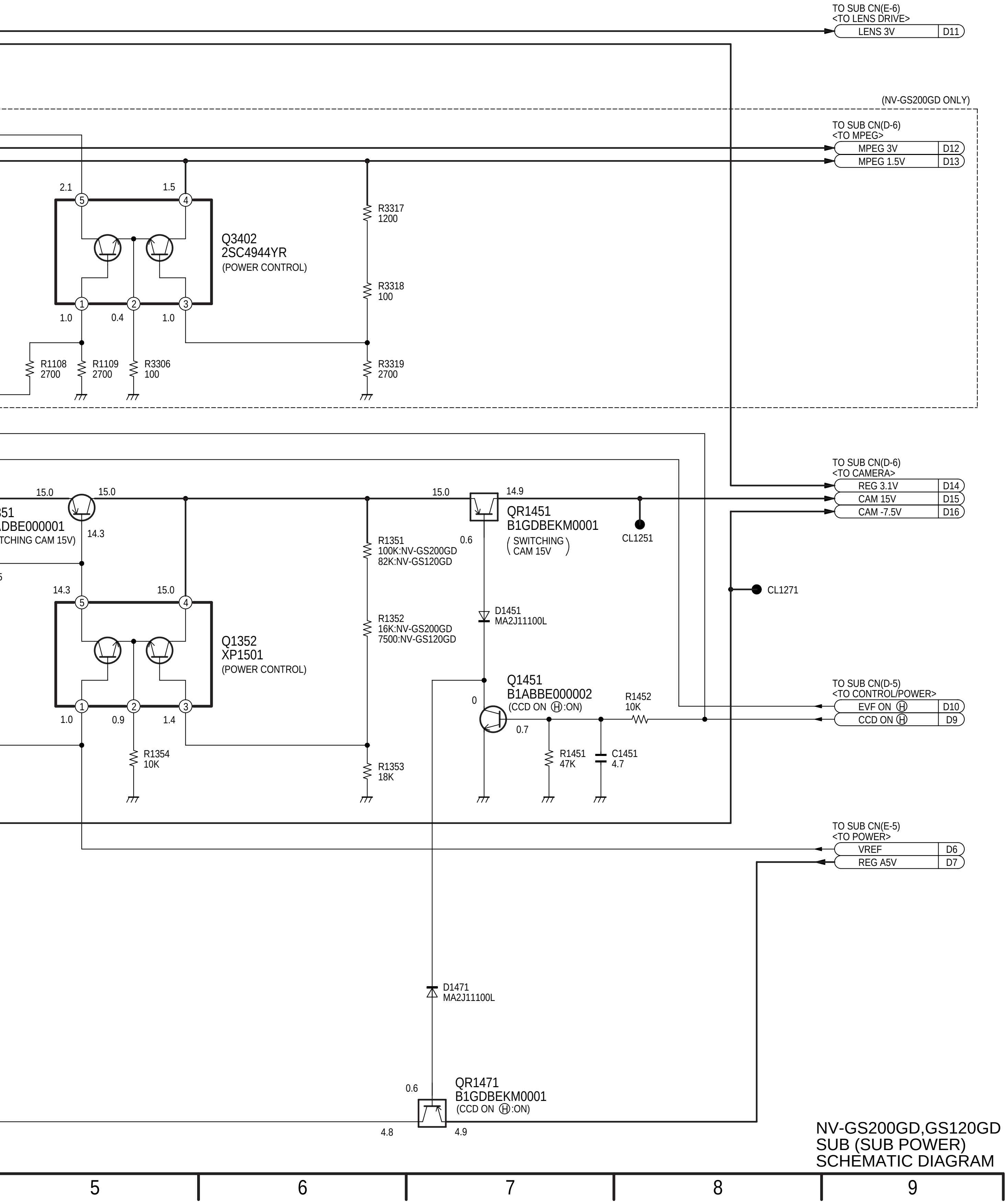
18	19	20	21	22

12.17. SUB (SUB POWER) SCHEMATIC DIAGRAM


(SUB C.B.A.)
REFER TO SUB CONNECTION
TO SUB CN(E-5/D-6)
<TO POWER>
D1 SW 3V(3)
D2 3CCD 3V
D18 SW 3V(2)
D17 MPEG D3V
D4 REG 15V
D5 REG -7.5V
D8 D GND
L1227 4.7u
L1231 4.7u
C1231 1
C1227 1
L1225 4.7u
C1229 6V10
C1225 1
L1242 4.7u
C1242 1
C1248 4V47
Q3401
2SB798A
(SWITCHING 1.5V)
2.1
1.5
2.9
R3316 1K
2.1
1.0
R1108 2700
R1395 100K
R1399 22K
C1382 4.7
15.0
Q1351
B1ADBE000001
(SWITCHING CAM 15V)
14.3
R1396
R1397
3900:NV-GS200GD
3300:NV-GS120GD
R1355 47K
14.8
0.7
14.3
Q1385
XP4501
(CCD ON Ⓗ :ON)
0
0
R1400
2700:NV-GS200GD
3900:NV-GS120GD
1.0
C1381 4.7
R1398 47K
-12.0
-7.7
Q1371
B1ABBE000002
(SWITCHING CAM-7.5V)
-11.3
R1375 10K
-11.3
-7.7
R1371 15K
Q1372
XP1401
(POWER CONTROL)
R1372 910
0.5
-0.1
R1374 12K
R1373 10K
F
E
D
C
B
A
1
2
3
4
5

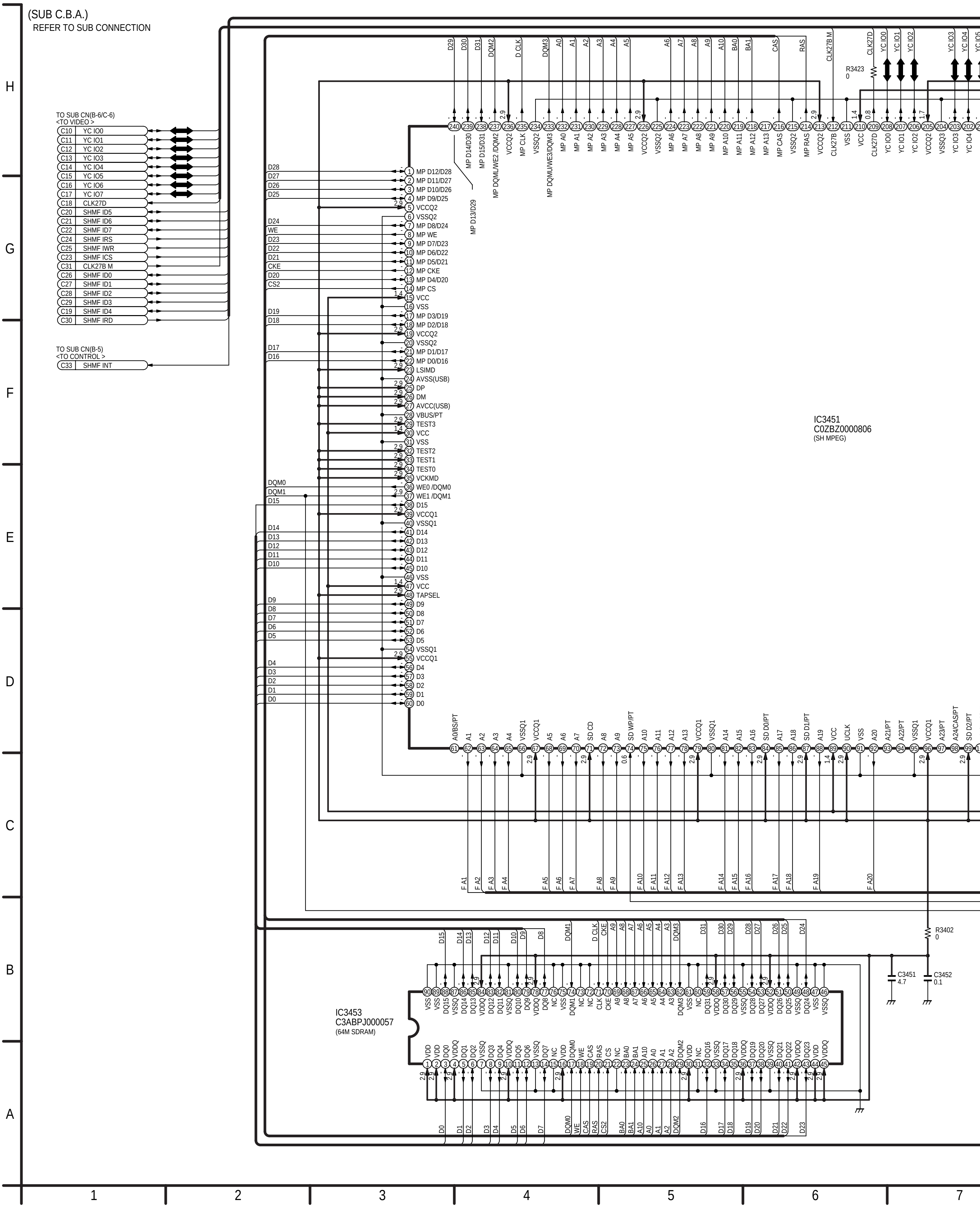
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

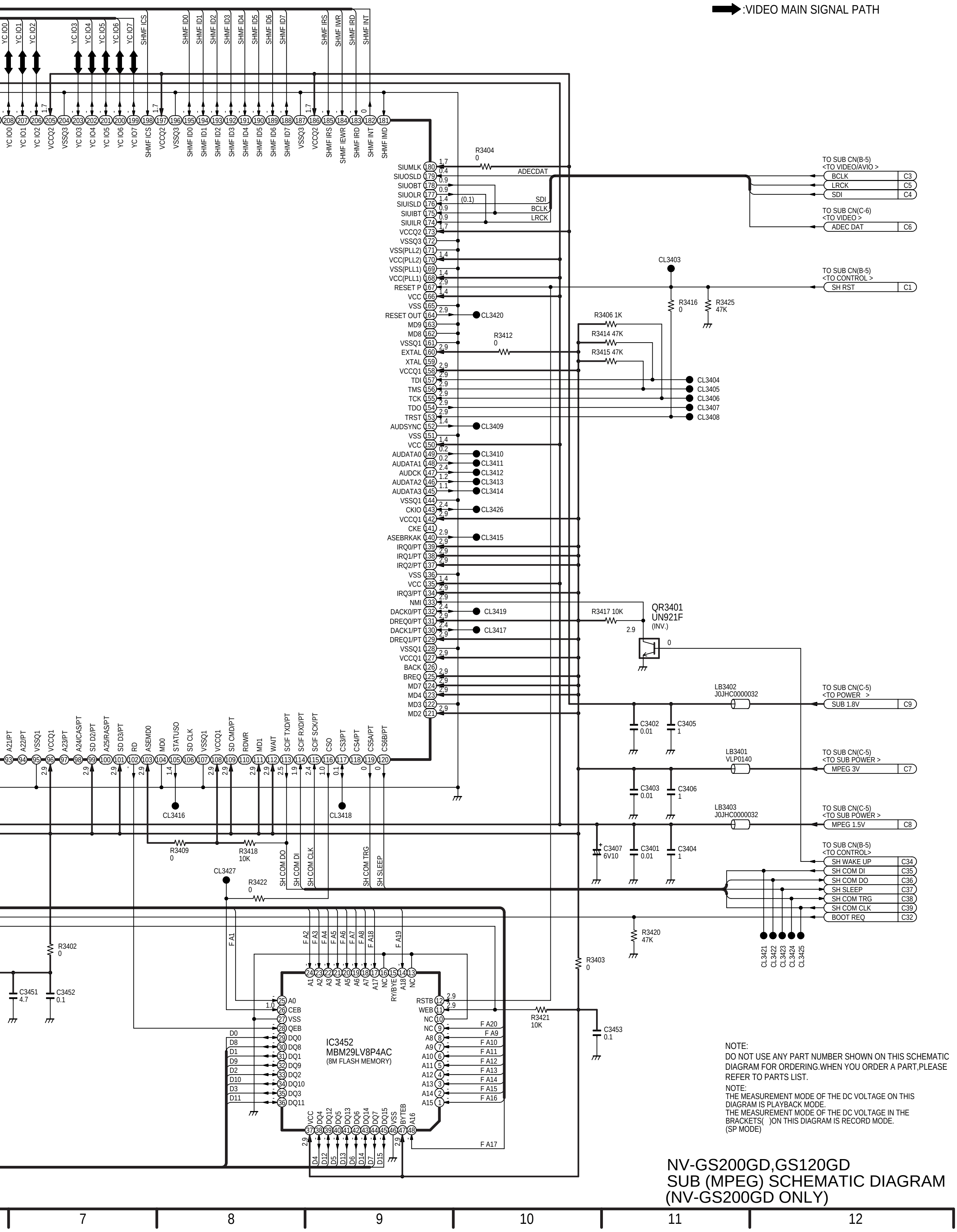
NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.


TO SUB CN(E-6)
<TO LENS DRIVE>
LENS 3V
D11
(NV-GS200GD ONLY)
TO SUB CN(D-6)
<TO MPEG>
MPEG 3V
D12
MPEG 1.5V
D13
2.1
1.5
5
4
Q3402
2SC4944YR
(POWER CONTROL)
R3317
1200
R3318
100
1
2
3
1.0
0.4
1.0
R1108
2700
R1109
2700
R3306
100
R3319
2700
TO SUB CN(D-6)
<TO CAMERA>
REG 3.1V
D14
CAM 15V
D15
CAM -7.5V
D16
15.0
15.0
351
ADBE000001
TCHING CAM 15V)
14.3
15.0
14.9
QR1451
B1GDBEKM0001
(SWITCHING CAM 15V)
CL1251
R1351
100K:NV-GS200GD
82K:NV-GS120GD
0.6
5
14.3
15.0
CL1271
D1451
MA2J11100L
R1352
16K:NV-GS200GD
7500:NV-GS120GD
Q1352
XP1501
(POWER CONTROL)
Q1451
B1ABBE000002
(CCD ON Ⓗ:ON)
0
R1452
10K
TO SUB CN(D-5)
<TO CONTROL/POWER>
EVF ON Ⓗ
D10
CCD ON Ⓗ
D9
1.0
0.9
1.4
0.7
R1354
10K
R1353
18K
R1451
47K
C1451
4.7
TO SUB CN(E-5)
<TO POWER>
VREF
D6
REG A5V
D7
D1471
MA2J11100L
0.6
QR1471
B1GDBEKM0001
(CCD ON Ⓗ:ON)
4.8
4.9
5
6
7
8
9

NV-GS200GD,GS120GD
SUB (SUB POWER)
SCHEMATIC DIAGRAM

12.18. SUB (MPEG) SCHEMATIC DIAGRAM (NV-GS200GD ONLY)


(SUB C.B.A.)
REFER TO SUB CONNECTION
TO SUB CN(B-6/C-6)
<TO VIDEO >
C10 YC IO0
C11 YC IO1
C12 YC IO2
C13 YC IO3
C14 YC IO4
C15 YC IO5
C16 YC IO6
C17 YC IO7
C18 CLK27D
C20 SHMF ID5
C21 SHMF ID6
C22 SHMF ID7
C24 SHMF IRS
C25 SHMF IWR
C23 SHMF ICS
C31 CLK27B M
C26 SHMF ID0
C27 SHMF ID1
C28 SHMF ID2
C29 SHMF ID3
C19 SHMF ID4
C30 SHMF IRD
TO SUB CN(B-5)
<TO CONTROL >
C33 SHMF INT
IC3451
C0ZBZ0000806
(SH MPEG)
1 MP D12/D28
2 MP D11/D27
3 MP D10/D26
4 MP D9/D25
5 VCCQ2
6 VSSQ2
7 MP D8/D24
8 MP WE
9 MP D7/D23
10 MP D6/D22
11 MP D5/D21
12 MP CKE
13 MP D4/D20
14 MP CS
15 VCC
16 VSS
17 MP D3/D19
18 MP D2/D18
19 VCCQ2
20 VSSQ2
21 MP D1/D17
22 MP D0/D16
23 LSIMD
24 AVSS(USB)
25 DP
26 DM
27 AVCC(USB)
28 VBUS/PT
29 TEST3
30 VCC
31 VSS
32 TEST2
33 TEST1
34 TEST0
35 VCKMD
36 WE0 /DQM0
37 WE1 /DQM1
38 D15
39 VCCQ1
40 VSSQ1
41 D14
42 D13
43 D12
44 D11
45 D10
46 VSS
47 VCC
48 TAPSEL
49 D9
50 D8
51 D7
52 D6
53 D5
54 VSSQ1
55 VCCQ1
56 D4
57 D3
58 D2
59 D1
60 D0
MP D14/D30
MP D15/D31
MP DQML/WE2 /DQM2
VCCQ2
MP CLK
VSSQ2
MP DQMU/WE3/DQM3
MP A0
MP A1
MP A2
MP A3
MP A4
MP A5
VCCQ2
VSSQ2
MP A6
MP A7
MP A8
MP A9
MP A10
MP A11
MP A12
MP A13
MP CAS
VSSQ2
MP RAS
VCCQ2
CLK27B
VSS
VCC
CLK27D
YC IO0
YC IO1
YC IO2
VCCQ2
VSSQ3
YC IO3
YC IO4
MP D13/D29
A0/BS/PT
A1
A2
A3
A4
VSSQ1
VCCQ1
A5
A6
A7
SD CD
A8
A9
SD WP/PT
A10
A11
A12
A13
VCCQ1
VSSQ1
A14
A15
A16
SD D0/PT
A17
A18
SD D1/PT
A19
VCC
UCLK
VSS
A20
A21/PT
A22/PT
VSSQ1
VCCQ1
A23/PT
A24/CAS/PT
SD D2/PT
R3423
0
R3402
0
C3451
4.7
C3452
0.1
IC3453
C3ABPJ000057
(64M SDRAM)
VSS
VSS
VSSQ
DQ15
DQ14
DQ13
VDDQ
DQ12
DQ11
VSSQ
DQ10
DQ9
VDDQ
DQ8
NC
VSS
DQM1
NC
CLK
CKE
A9
A8
A7
A6
A5
A4
A3
DQM3
VSS
NC
DQ31
VDDQ
DQ30
DQ29
VSSQ
DQ28
DQ27
VDDQ
DQ26
DQ25
VSSQ
DQ24
VSS
VSSQ
VDD
VDD
VDDQ
DQ0
DQ1
DQ2
VSSQ
DQ3
DQ4
VDDQ
DQ5
DQ6
VSSQ
DQ7
NC
VDD
DQM0
WE
CAS
RAS
CS
NC
BA0
BA1
A10
A0
A1
A2
DQM2
VDD
NC
DQ16
VSSQ
DQ17
DQ18
VDDQ
DQ19
DQ20
VSSQ
DQ21
DQ22
VDDQ
DQ23
VDD
VDDQ
F A1
F A2
F A3
F A4
F A5
F A6
F A7
F A8
F A9
F A10
F A11
F A12
F A13
F A14
F A15
F A16
F A17
F A18
F A19
F A20
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7


:VIDEO MAIN SIGNAL PATH
YC IO0
YC IO1
YC IO2
YC IO3
YC IO4
YC IO5
YC IO6
YC IO7
SHMF ICS
SHMF ID0
SHMF ID1
SHMF ID2
SHMF ID3
SHMF ID4
SHMF ID5
SHMF ID6
SHMF ID7
SHMF IRS
SHMF IWR
SHMF IRD
SHMF INT
SHMF IMD
VCCQ2
VSSQ3
SHMF IEWR
R3404 0
ADECDAT
SIUMLK
SIUOSLD
SIUOBT
SIUOLR
SIUISLD
SIUIBT
SIUILR
VSS(PLL2)
VCC(PLL2)
VSS(PLL1)
VCC(PLL1)
RESET P
VCC
VSS
RESET OUT
MD9
MD8
VSSQ1
EXTAL
XTAL
VCCQ1
TDI
TMS
TCK
TDO
TRST
AUDSYNC
AUDATA0
AUDATA1
AUDCK
AUDATA2
AUDATA3
CKIO
CKE
ASEBRKAK
IRQ0/PT
IRQ1/PT
IRQ2/PT
IRQ3/PT
NMI
DACK0/PT
DREQ0/PT
DACK1/PT
DREQ1/PT
BACK
BREQ
MD7
MD4
MD3
MD2
SDI
BCLK
LRCK
(0.1)
TO SUB CN(B-5)
<TO VIDEO/AVIO >
BCLK C3
LRCK C5
SDI C4
TO SUB CN(C-6)
<TO VIDEO >
ADEC DAT C6
CL3403
TO SUB CN(B-5)
<TO CONTROL >
SH RST C1
R3416 0
R3425 47K
R3406 1K
R3414 47K
R3415 47K
R3412 0
CL3420
CL3404
CL3405
CL3406
CL3407
CL3408
CL3409
CL3410
CL3411
CL3412
CL3413
CL3414
CL3426
CL3415
CL3419
CL3417
R3417 10K
QR3401
UN921F
(INV.)
LB3402
J0JHC0000032
TO SUB CN(C-5)
<TO POWER >
SUB 1.8V C9
C3402 0.01
C3405 1
LB3401
VLP0140
TO SUB CN(C-5)
<TO SUB POWER >
MPEG 3V C7
C3403 0.01
C3406 1
LB3403
J0JHC0000032
TO SUB CN(C-5)
<TO SUB POWER >
MPEG 1.5V C8
C3407 6V10
C3401 0.01
C3404 1
TO SUB CN(B-5)
<TO CONTROL>
SH WAKE UP C34
SH COM DI C35
SH COM DO C36
SH SLEEP C37
SH COM TRG C38
SH COM CLK C39
BOOT REQ C32
R3420 47K
CL3421
CL3422
CL3423
CL3424
CL3425
R3403 0
A21/PT
A22/PT
A23/PT
A24/CAS/PT
A25/RAS/PT
SD D2/PT
SD D3/PT
RD
ASEMD0
MD0
STATUS0
SD CLK
SD CMD/PT
RDWR
MD1
WAIT
SCIF TXD/PT
SCIF RXD/PT
SCIF SCK/PT
CSO
CS3/PT
CS4/PT
CS5A/PT
CS6B/PT
CL3416
CL3418
R3409 0
R3418 10K
CL3427
R3422 0
SH COM DO
SH COM DI
SH COM CLK
SH COM TRG
SH SLEEP
R3402 0
C3451 4.7
C3452 0.1
F A1
F A2
F A3
F A4
F A5
F A6
F A7
F A8
F A18
F A19
IC3452
MBM29LV8P4AC
(8M FLASH MEMORY)
A0
CEB
VSS
QEB
DQ0
DQ8
DQ1
DQ9
DQ2
DQ10
DQ3
DQ11
RSTB
WEB
NC
A8
A9
A10
A11
A12
A13
A14
A15
RY/BYE
A16
A17
A18
BYTEB
VCC
DQ4
DQ12
DQ5
DQ13
DQ6
DQ14
DQ7
DQ15
D0
D8
D1
D9
D2
D10
D3
D11
D4
D12
D5
D13
D6
D14
D7
D15
F A20
F A9
F A10
F A11
F A12
F A13
F A14
F A15
F A16
F A17
R3421 10K
C3453 0.1
7
8
9
10
11
12

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE.
(SP MODE)

NV-GS200GD,GS120GD
SUB (MPEG) SCHEMATIC DIAGRAM
(NV-GS200GD ONLY)

12.18.1. DSC I/O TABLE

IC3451 : DSC CONTROL MICROCOMPUTER

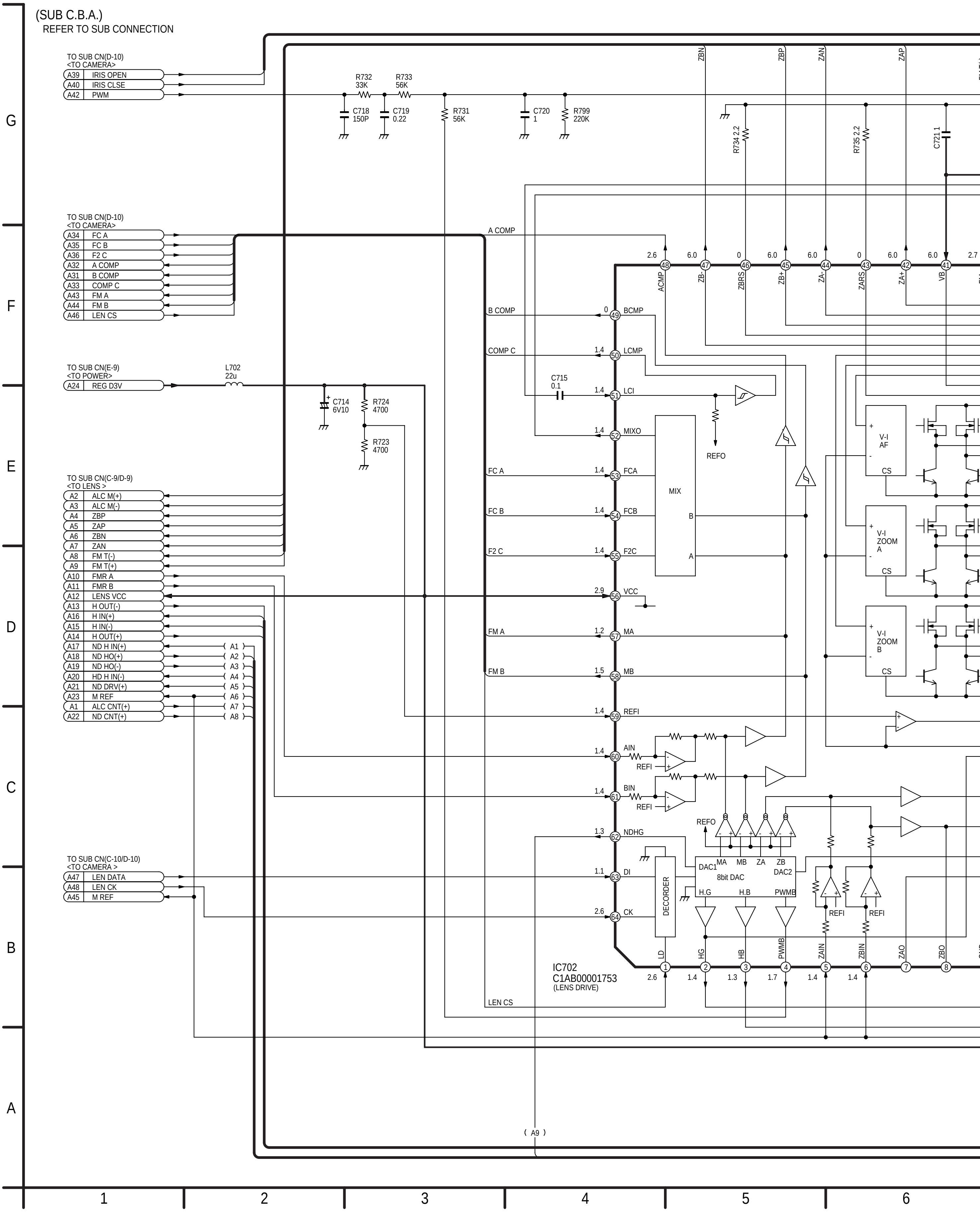
Pin No.	Signal Name	I/O	Explanation
1	MP D12/D28	I/O	SDRAM data Bus/data Bus
2	MP D11/D27	I/O	SDRAM data Bus/data Bus
3	MP D10/D26	I/O	SDRAM data Bus/data Bus
4	MP D9/D25	I/O	SDRAM data Bus/data Bus
5	VCCQ2	I	Voltage
6	VSSQ2	-	GND
7	MP D8/D24	I/O	SDRAM data Bus/data Bus
8	MP WE	O	SDRAM Write Enable
9	MP D7/D23	I/O	SDRAM data Bus/data Bus
10	MP D6/D22	I/O	SDRAM data Bus/data Bus
11	MP D5/D21	I/O	SDRAM data Bus/data Bus
12	MP CKE	O	SDRAM Clock Enable
13	MP D4/D20	I/O	SDRAM data Bus/data Bus
14	MP CS	O	SDRAM Chip Select
15	VCC	I	Voltage
16	VSS	-	GND
17	MP D3/D19	I/O	SDRAM data Bus/data Bus
18	MP D2/D18	I/O	SDRAM data Bus/data Bus
19	VCCQ2	I	Voltage
20	VSSQ2	-	GND
21	MP D1/D17	I/O	SDRAM data Bus/data Bus
22	MP D0/D16	I/O	SDRAM data Bus/data Bus
23	LSIMD	I	Voltage
24	AVSS(USB)	-	GND
25	DP	I	Voltage
26	DM	I	Voltage
27	AVCC(USB)	I	Voltage
28	VBUS/PT	-	GND
29	TEST3	I	Voltage
30	VCC	I	Voltage
31	VSS	-	GND
32	TEST2	I	Voltage
33	TEST1	I	Voltage
34	TEST0	I	Voltage
35	VCKMD	I	Voltage
36	WE0/DQM0	O	D7-0WE/DQM(SDRAM)
37	WE1/DOM1	O	D15-8WE/DQM(SDRAM)
38	D15	I/O	data Bus
39	VCCQ1	I	Voltage
40	VSSQ1	-	GND
41	D14	I/O	data Bus
42	D13	I/O	data Bus
43	D12	I/O	data Bus
44	D11	I/O	data Bus
45	D10	I/O	data Bus
46	VSS	-	GND
47	VCC	I	Voltage
48	TAP SEL	I	Voltage
49	D9	I/O	data Bus
50	D8	I/O	data Bus
51	D7	I/O	data Bus
52	D6	I/O	data Bus
53	D5	I/O	data Bus
54	VSSQ1	-	GND
55	VCCQ1	I	Voltage
56	D4	I/O	data Bus
57	D3	I/O	data Bus
58	D2	I/O	data Bus
59	D1	I/O	data Bus
60	D0	I/O	data Bus
61	A0/BS/PT	-	NC
62	A1	O	Address Bus
63	A2	O	Address Bus
64	A3	O	Address Bus
65	A4	O	Address Bus
66	VSSQ1	-	GND
67	VCCQ1	I	Voltage
68	A5	O	Address Bus
69	A6	O	Address Bus
70	A7	O	Address Bus
71	SD CD	I	Voltage
72	A8	O	Address Bus
73	A9	O	Address Bus
74	SD WP/PT	I	SD Write Protect Signal/Port
75	A10	O	Address Bus
76	A11	O	Address Bus
77	A12	O	Address Bus
78	A13	O	Address Bus
79	VCCQ1	I	Voltage
80	VSSQ1	-	GND
81	A14	O	Address Bus
82	A15	O	Address Bus
83	A16	O	Address Bus
84	SD DO/PT	I	Voltage
85	A17	O	Address Bus
86	A18	O	Address Bus
87	SD D1/PT	I	Voltage
88	A19	O	Address Bus
89	VCC	I	Voltage
90	UCLK	I	Voltage
91	VSS	-	GND
92	A20	O	Address Bus
93	A21/PT	-	NC
94	A22/PT	-	NC
95	VSSQ1	-	GND
96	VCCQ1	I	Voltage
97	A23/PT	-	NC
98	A24/CAS/PT	-	NC
99	SD D2/PT	I	Voltage
100	A25/RAS/PT	-	NC
101	SD D3/PT	I	Voltage
102	RD	O	Read Signal
103	ASEMD0	I	Voltage
104	MD0	-	GND
105	STATUS0	O	Processor Status Out
106	SD CLK	-	NC
107	VSSQ1	-	GND
108	VCCQ1	I	Voltage
109	SD CMD/PT	I	Voltage
110	RDWR	-	NC
111	MD1	I	Voltage
112	WAIT	I	Voltage
113	SCIF TXD/PT	O	Serial Transmission data/Port
114	SCIF RXD/PT	I	Serial Reception data/Port
115	SCIF SCK/PT	I	Serial Clock Input-Output/Port
116	CS0	O	Chip Select 0
117	CS3/PT	I/O	Chip Select 3/Port
118	CS4/PT	-	NC
119	CS5A/PT	O	Chip Select 5A/Port
120	CS5B/PT	O	Chip Select 5B/Port
121	MD2	I	Voltage
122	MD3	-	GND

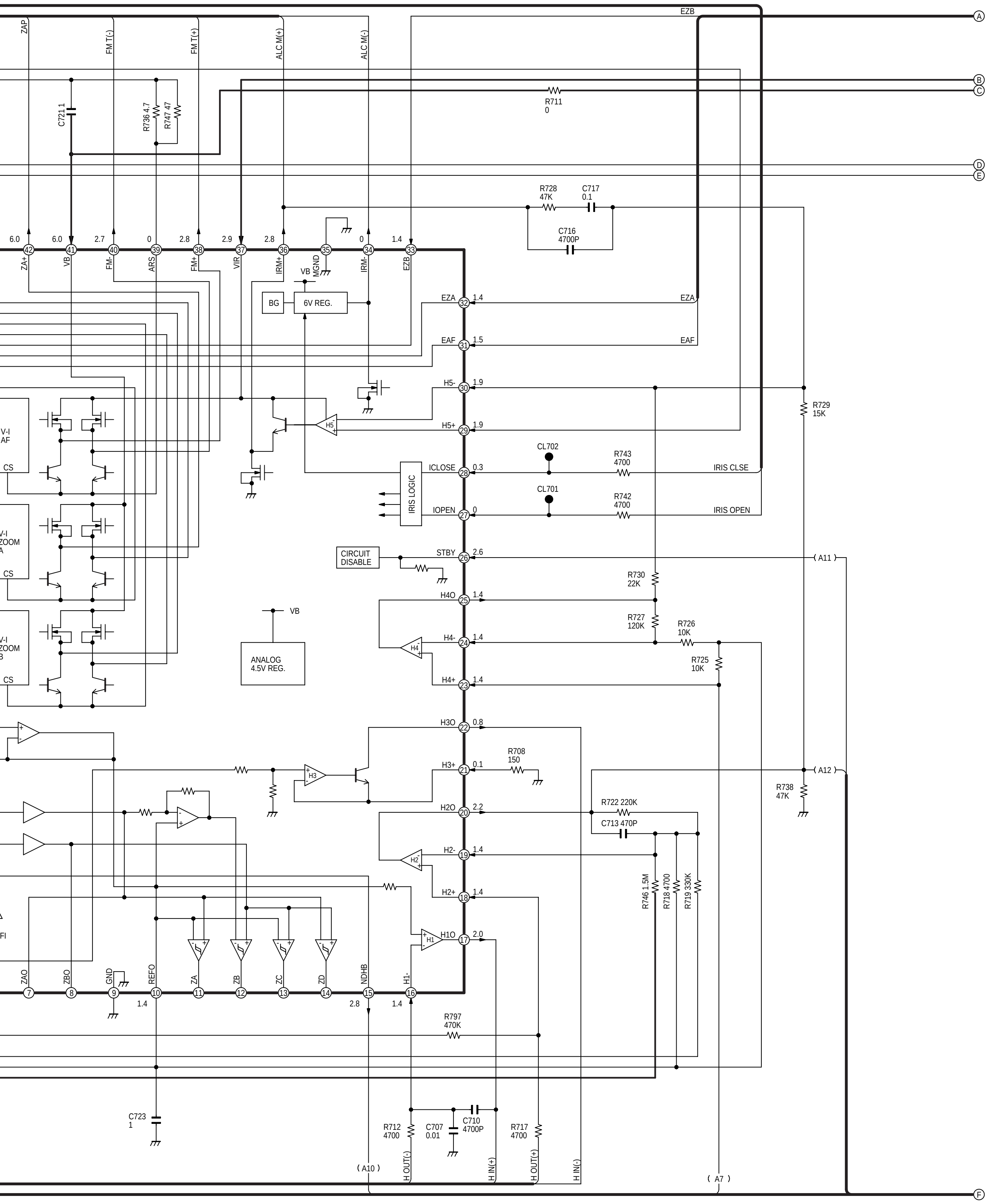
Pin No.	Signal Name	I/O	Explanation
123	MD4	I	Voltage
124	MD7	I	Voltage
125	BREQ	I	Voltage
126	BACK	-	NC
127	VCCQ1	I	Voltage
128	VSSQ1	-	GND
129	DREQ1/PT	I	Voltage
130	DACK1/PT	I/O	DMA Forward demand information1/PORT
131	DREQ0/PT	I	Voltage
132	DACK0/PT	I/O	DMA Forward demand information0/PORT
133	NMI	I	Power Save Cancel
134	IRQ3/PT	I	Voltage
135	VCC	I	Voltage
136	VSS	-	GND
137	IRQ2/PT	I	Voltage
138	IRQ1/PT	I	Voltage
139	IRQ0/PT	I	Voltage
140	ASEBRKAK	O	Blake Mode
141	CKE	-	NC
142	VCCQ1	I	Voltage
143	CKIO	I/O	System Clock Input-Output
144	VSSQ1	-	GND
145	AU DATA3	O	AUD data
146	AU DATA2	O	AUD data
147	AU DCK	O	AUD Clock
148	AU DATA1	O	AUD data
149	AU DATA0	O	AUD data
150	VCC	I	Voltage
151	VSS	-	GND
152	AUD SYNC	O	AUD Synchronous signal
153	TRST	I	Test Reset
154	TDO	O	Test data Output
155	TCK	I	Test Clock Input
156	TMS	I	Test Mode Select Signal
157	TDI	I	Test data Input
158	VCCQ1	I	Voltage
159	XTAL	-	NC
160	EXTAL	I	Voltage
161	VSSQ1	-	GND
162	MD8	-	GND
163	MD9	-	GND
164	RESET OUT	O	MFI Reset Output
165	VSS	-	GND
166	VCC	I	Voltage
167	RESET P	I	Power On Reset
168	VCC(PLL1)	I	Voltage
169	VSS(PLL1)	-	GND
170	VCC(PLL2)	I	Voltage
171	VSS(PLL2)	-	GND
172	VSSQ3	-	GND
173	VCCQ2	I	Voltage
174	SIUILR	I	Audio In L/R Clock
175	SIUIBT	I	Audio In Bit Clock
176	SIUISLD	I	Audio In Serial data
177	SIUOLR	O	Audio In-Out L/R Clock
178	SIUOBT	O	Audio In-Out Bit Clock
179	SIUOSLD	I	Audio Ootput Serial data
180	SIUMLK	I	Voltage
181	SHMF IMD	I	MFI Mode Change

Pin No.	Signal Name	I/O	Explanation
182	SHMF INT	O	MFI Interruption Output
183	SHMF IRD	I	MFI RW/READ
184	SHMF IEWR	I	MFI Enable/Write
185	SHMF IRS	I	MFI Registra Select
186	VCCQ2	I	Voltage
187	VSSQ3	-	GND
188	SHMF ID7	I/O	MFI data/Video data Output
189	SHMF ID6	I/O	MFI data/Video data Output
190	SHMF ID5	I/O	MFI data/Video data Output
191	SHMF ID4	I/O	MFI data/Video data Output
192	SHMF ID3	I/O	MFI data/Video data Output
193	SHMF ID2	I/O	MFI data/Video data Output
194	SHMF ID1	I/O	MFI data/Video data Output
195	SHMF ID0	I/O	MFI data/Video data Output
196	VSSQ3	-	GND
197	VCCQ2	I	Voltage
198	SHMF ICS	I	MFI Chip Select
199	YC IO7	I/O	Video data Input-Output
200	YC IO6	I/O	Video data Input-Output
201	YC IO5	I/O	Video data Input-Output
202	YC IO4	I/O	Video data Input-Output
203	YC IO3	I/O	Video data Input-Output
204	VSSQ3	-	GND
205	VCCQ2	I	Voltage
206	YC IO2	I/O	Video data Input-Output
207	YC IO1	I/O	Video data Input-Output
208	YC IO0	I/O	Video data Input-Output
209	CLK27D	O	Video Clock Out(27MHz)
210	VCC	I	Voltage
211	VSS	-	GND
212	CLK27B	I	Video Clock In(27MHz)
213	VCCQ2	I	Voltage
214	MP RAS	O	SDRAM Address Bus
215	VSSQ2	-	GND
216	MP CAS	O	SDRAM Address Bus
217	MP A13	-	NC
218	MP A12	O	SDRAM Address Bus
219	MP A11	O	SDRAM Address Bus
220	MP A10	O	SDRAM Address Bus
221	MP A9	O	SDRAM Address Bus
222	MP A8	O	SDRAM Address Bus
223	MP A7	O	SDRAM Address Bus
224	MP A6	O	SDRAM Address Bus
225	VSSQ2	-	GND
226	VCCQ2	I	Voltage
227	MP A5	O	SDRAM Address Bus
228	MP A4	O	SDRAM Address Bus
229	MP A3	O	SDRAM Address Bus
230	MP A2	O	SDRAM Address Bus
231	MP A1	O	SDRAM Address Bus
232	MP A0	O	SDRAM Address Bus
233	MP DQMU/WE3/DQM3	O	D7-0In-Out Mask/D23-16 Write Enable/DQM (SDRAM)
234	VSSQ2	-	GND
235	MP CLK	O	SDRAM Clock
236	VCCQ2	I	Voltage
237	MP DQML/WE2/DQM2	O	D7-0In-Out Mask/D23-16 Write Enable/DQM (SDRAM)
238	MP D15/ D31	I/O	SDRAM data Bus/data Bus
239	MP D14/ D30	I/O	SDRAM data Bus/data Bus
240	MP D13/ D29	I/O	SDRAM data Bus/data Bus

NV-GS200GD,GS120GD
DSC I/O TABLE

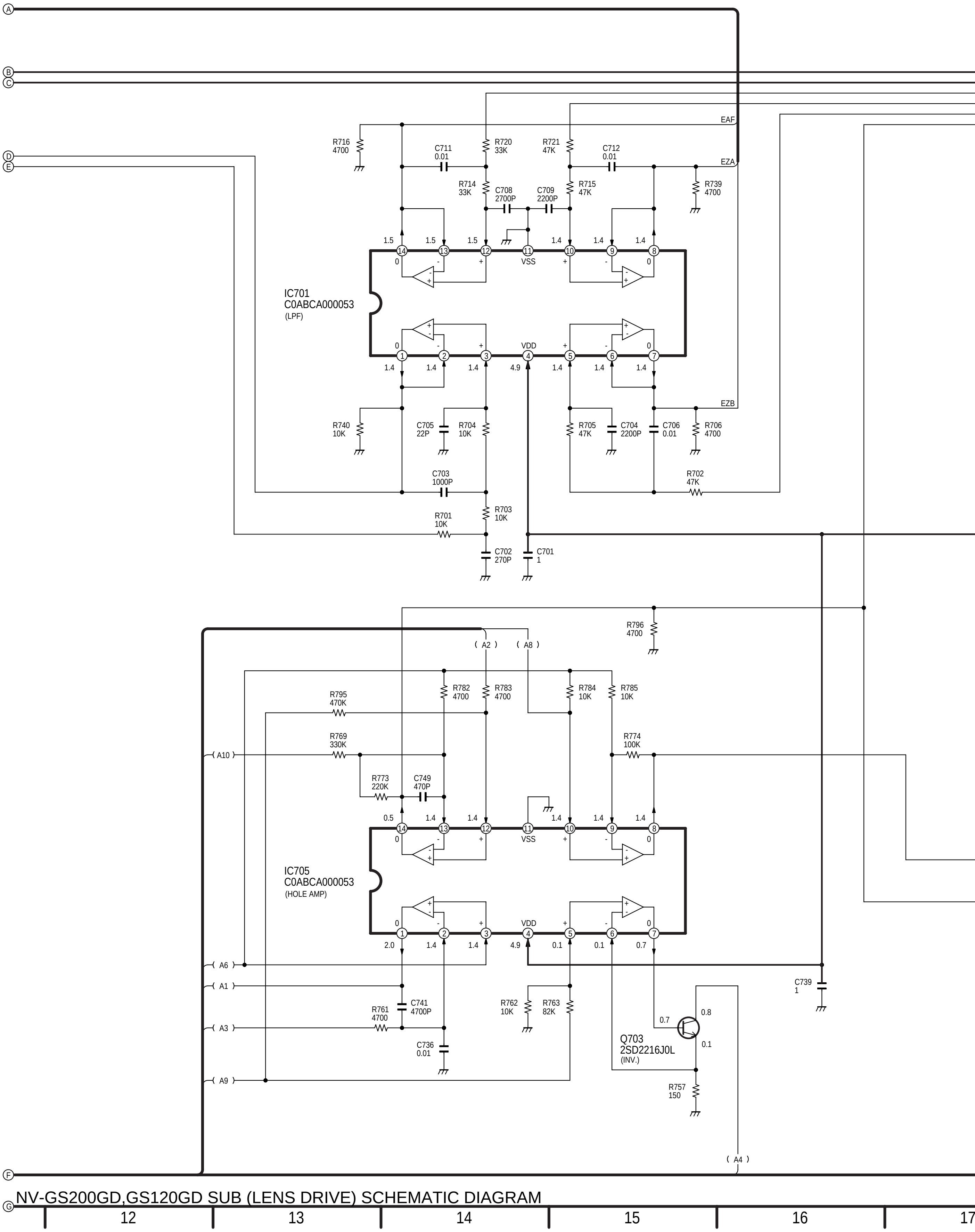
12.19. SUB (LENS DRIVE) SCHEMATIC DIAGRAM


(SUB C.B.A.)
REFER TO SUB CONNECTION
TO SUB CN(D-10)
<TO CAMERA>
A39 IRIS OPEN
A40 IRIS CLSE
A42 PWM
R732 33K
R733 56K
C718 150P
C719 0.22
R731 56K
C720 1
R799 220K
ZBN
ZBP
ZAN
ZAP
R734 2.2
R735 2.2
C721 1
TO SUB CN(D-10)
<TO CAMERA>
A34 FC A
A35 FC B
A36 F2 C
A32 A COMP
A31 B COMP
A33 COMP C
A43 FM A
A44 FM B
A46 LEN CS
A COMP
B COMP
COMP C
TO SUB CN(E-9)
<TO POWER>
A24 REG D3V
L702 22u
C714 6V10
R724 4700
R723 4700
C715 0.1
TO SUB CN(C-9/D-9)
<TO LENS >
A2 ALC M(+)
A3 ALC M(-)
A4 ZBP
A5 ZAP
A6 ZBN
A7 ZAN
A8 FM T(-)
A9 FM T(+)
A10 FMR A
A11 FMR B
A12 LENS VCC
A13 H OUT(-)
A16 H IN(+)
A15 H IN(-)
A14 H OUT(+)
A17 ND H IN(+)
A18 ND HO(+)
A19 ND HO(-)
A20 HD H IN(-)
A21 ND DRV(+)
A23 M REF
A1 ALC CNT(+)
A22 ND CNT(+)
A1
A2
A3
A4
A5
A6
A7
A8
FC A
FC B
F2 C
FM A
FM B
2.6 48 ACMP
6.0 47 ZB-
0 46 ZBRS
6.0 45 ZB+
6.0 44 ZA-
0 43 ZARS
6.0 42 ZA+
6.0 41 VB
2.7
0 49 BCMP
1.4 50 LCMP
1.4 51 LCI
1.4 52 MIXO
1.4 53 FCA
1.4 54 FCB
1.4 55 F2C
2.9 56 VCC
1.2 57 MA
1.5 58 MB
1.4 59 REFI
1.4 60 AIN
1.4 61 BIN
1.3 62 NDHG
1.1 63 DI
2.6 64 CK
REFO
MIX
B
A
REFI
REFI
V-I
AF
CS
V-I
ZOOM
A
CS
V-I
ZOOM
B
CS
REFO
DAC1
MA
MB
ZA
ZB
DAC2
8bit DAC
H.G
H.B
PWMB
DECORDER
REFI
REFI
TO SUB CN(C-10/D-10)
<TO CAMERA >
A47 LEN DATA
A48 LEN CK
A45 M REF
LD 1 2.6
HG 2 1.4
HB 3 1.3
PWMB 4 1.7
ZAIN 5 1.4
ZBIN 6 1.4
ZAO 7
ZBO 8
IC702
C1AB00001753
(LENS DRIVE)
LEN CS
(A9)
G
F
E
D
C
B
A
1
2
3
4
5
6

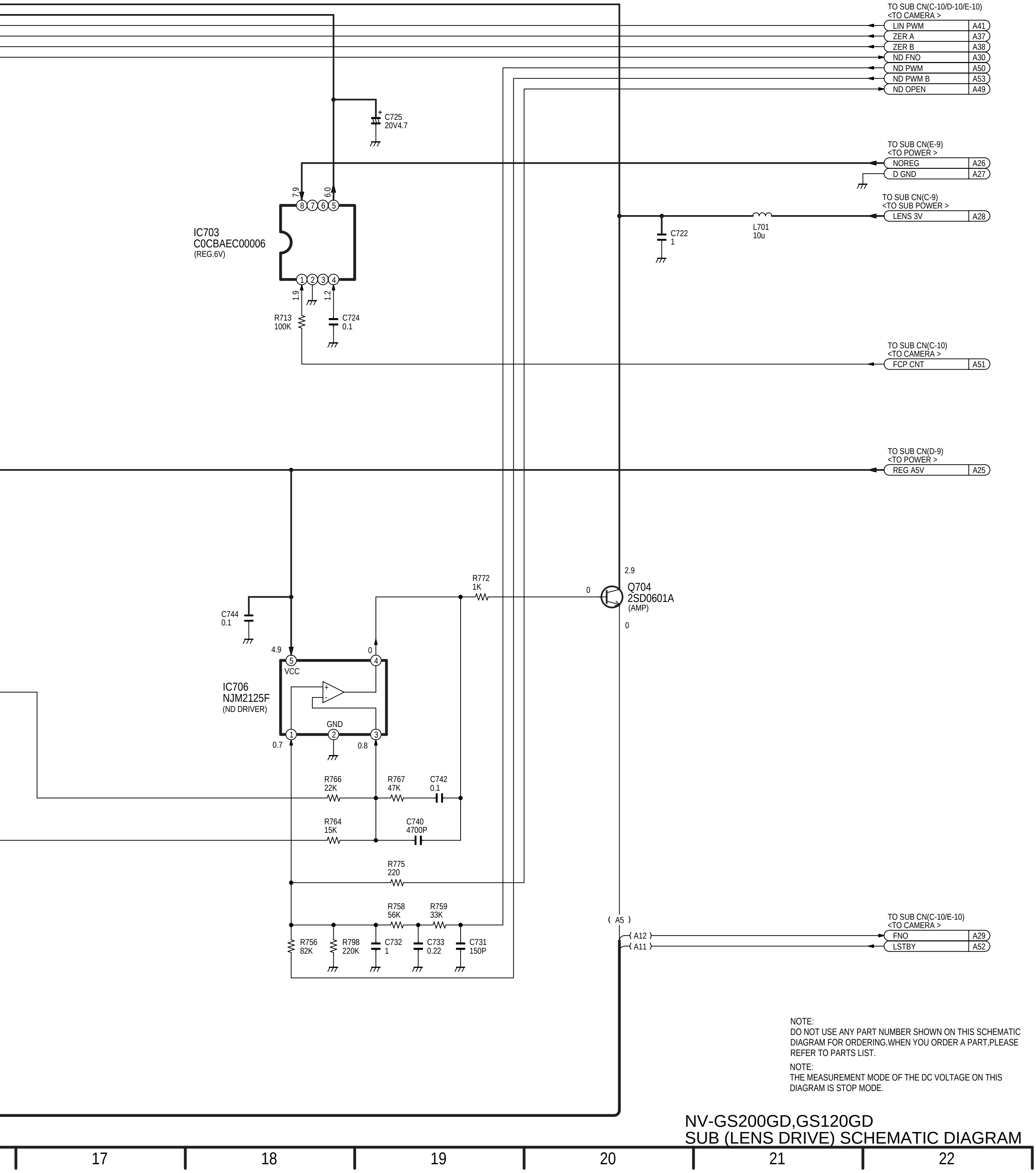

EZB
A
B
C
D
E
F
G
ZAP
FM T(-)
FM T(+)
ALC M(+)
ALC M(-)
R711
0
C721 1
R736 4.7
R747 47
R728
47K
C717
0.1
C716
4700P
6.0
6.0
2.7
0
2.8
2.9
2.8
0
1.4
42
41
40
39
38
37
36
35
34
33
ZA+
VB
FM-
ARS
FM+
VIR
IRM+
MGND
IRM-
EZB
VB
BG
6V REG.
EZA
32
1.4
EZA
EAF
31
1.5
EAF
H5-
30
1.9
H5+
29
1.9
H5
R729
15K
V-I
AF
CS
CL702
R743
4700
ICLOSE
28
0.3
IRIS CLSE
IRIS LOGIC
CL701
R742
4700
IOPEN
27
0
IRIS OPEN
V-I
ZOOM
A
CS
CIRCUIT
DISABLE
STBY
26
2.6
A11
R730
22K
H4O
25
1.4
VB
R727
120K
R726
10K
V-I
ZOOM
B
CS
H4-
24
1.4
H4
R725
10K
ANALOG
4.5V REG.
H4+
23
1.4
H3O
22
0.8
R708
150
H3
H3+
21
0.1
A12
R738
47K
H2O
20
2.2
R722 220K
C713 470P
H2-
19
1.4
H2
R746 1.5M
R718 4700
R719 330K
H2+
18
1.4
FI
H1O
17
2.0
H1
ZAO
ZBO
GND
REFO
ZA
ZB
ZC
ZD
NDHB
H1-
7
8
9
10
11
12
13
14
15
16
1.4
2.8
1.4
R797
470K
C723
1
R712
4700
C707
0.01
C710
4700P
R717
4700
A10
H OUT(-)
H IN(+)
H OUT(+)
H IN(-)
A7

NV-GS200GD,GS120GD SUB (LENS DRIVE) SCHEMATIC DIAGRAM

6 7 8 9 10 11


A
B
C
D
E
F
G
EAF
EZA
EZB
R716 4700
C711 0.01
R720 33K
R721 47K
C712 0.01
R714 33K
C708 2700P
C709 2200P
R715 47K
R739 4700
IC701
C0ABCA000053
(LPF)
VSS
VDD
R740 10K
C705 22P
R704 10K
R705 47K
C704 2200P
C706 0.01
R706 4700
C703 1000P
R702 47K
R703 10K
R701 10K
C702 270P
C701 1
R796 4700
(A2)
(A8)
R795 470K
R782 4700
R783 4700
R784 10K
R785 10K
(A10)
R769 330K
R774 100K
R773 220K
C749 470P
IC705
C0ABCA000053
(HOLE AMP)
(A6)
(A1)
(A3)
(A9)
R761 4700
C741 4700P
C736 0.01
R762 10K
R763 82K
C739 1
Q703
2SD2216J0L
(INV.)
R757 150
(A4)
12
13
14
15
16
17

NV-GS200GD,GS120GD SUB (LENS DRIVE) SCHEMATIC DIAGRAM

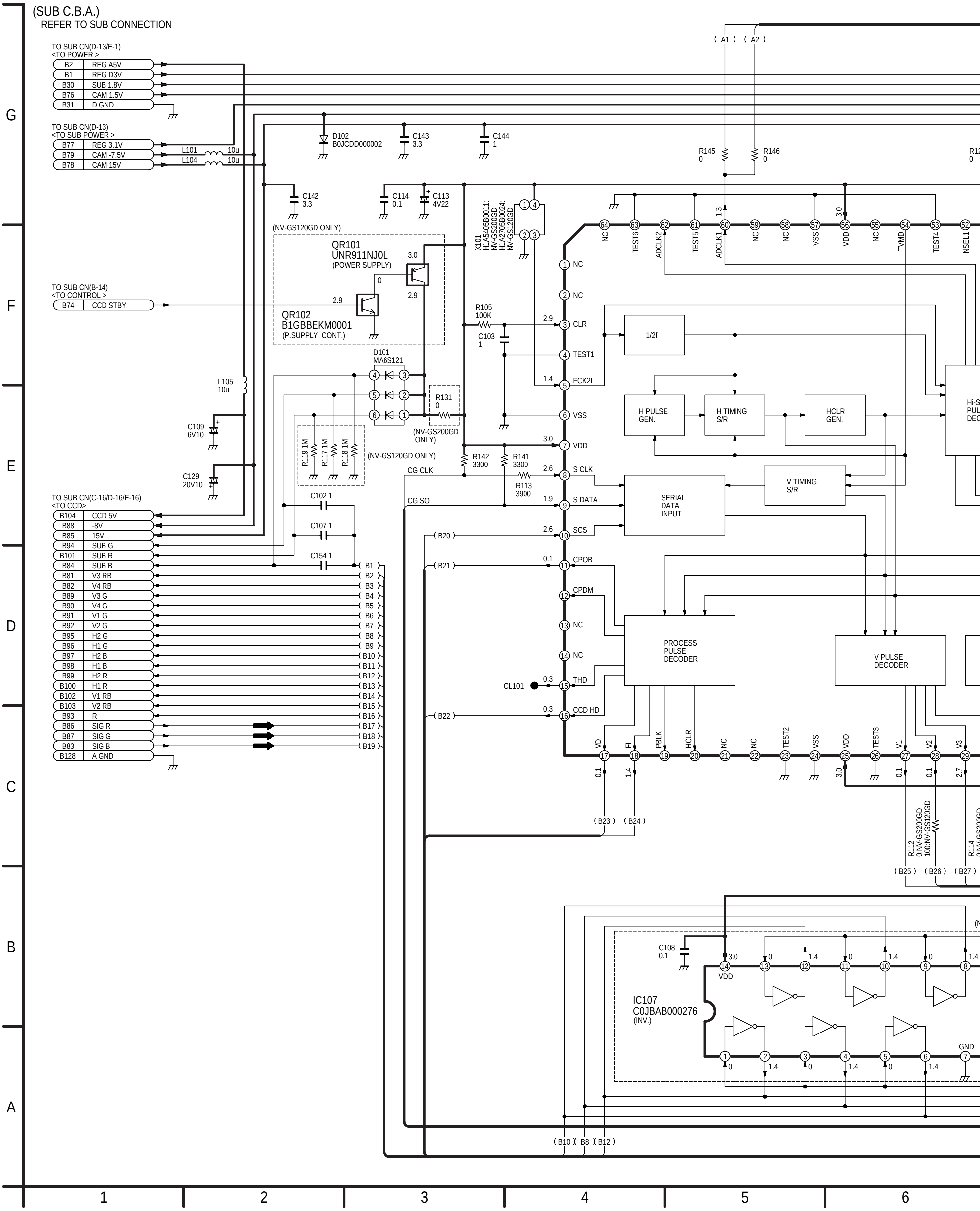

TO SUB CN(C-10/D-10/E-10)
<TO CAMERA >
LIN PWM A41
ZER A A37
ZER B A38
ND FNO A30
ND PWM A50
ND PWM B A53
ND OPEN A49
C725
20V4.7
TO SUB CN(E-9)
<TO POWER >
NOREG A26
D GND A27
TO SUB CN(C-9)
<TO SUB POWER >
LENS 3V A28
C722
1
L701
10u
7.9
6.0
8 7 6 5
IC703
C0CBAEC00006
(REG.6V)
1 2 3 4
1.9
1.2
R713
100K
C724
0.1
TO SUB CN(C-10)
<TO CAMERA >
FCP CNT A51
TO SUB CN(D-9)
<TO POWER >
REG A5V A25
R772
1K
2.9
0
Q704
2SD0601A
(AMP)
0
C744
0.1
4.9
0
5
4
VCC
IC706
NJM2125F
(ND DRIVER)
GND
1
2
3
0.7
0.8
R766
22K
R767
47K
C742
0.1
R764
15K
C740
4700P
R775
220
R758
56K
R759
33K
R756
82K
R798
220K
C732
1
C733
0.22
C731
150P
(A5)
(A12)
(A11)
TO SUB CN(C-10/E-10)
<TO CAMERA >
FNO A29
LSTBY A52
17
18
19
20
21
22

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

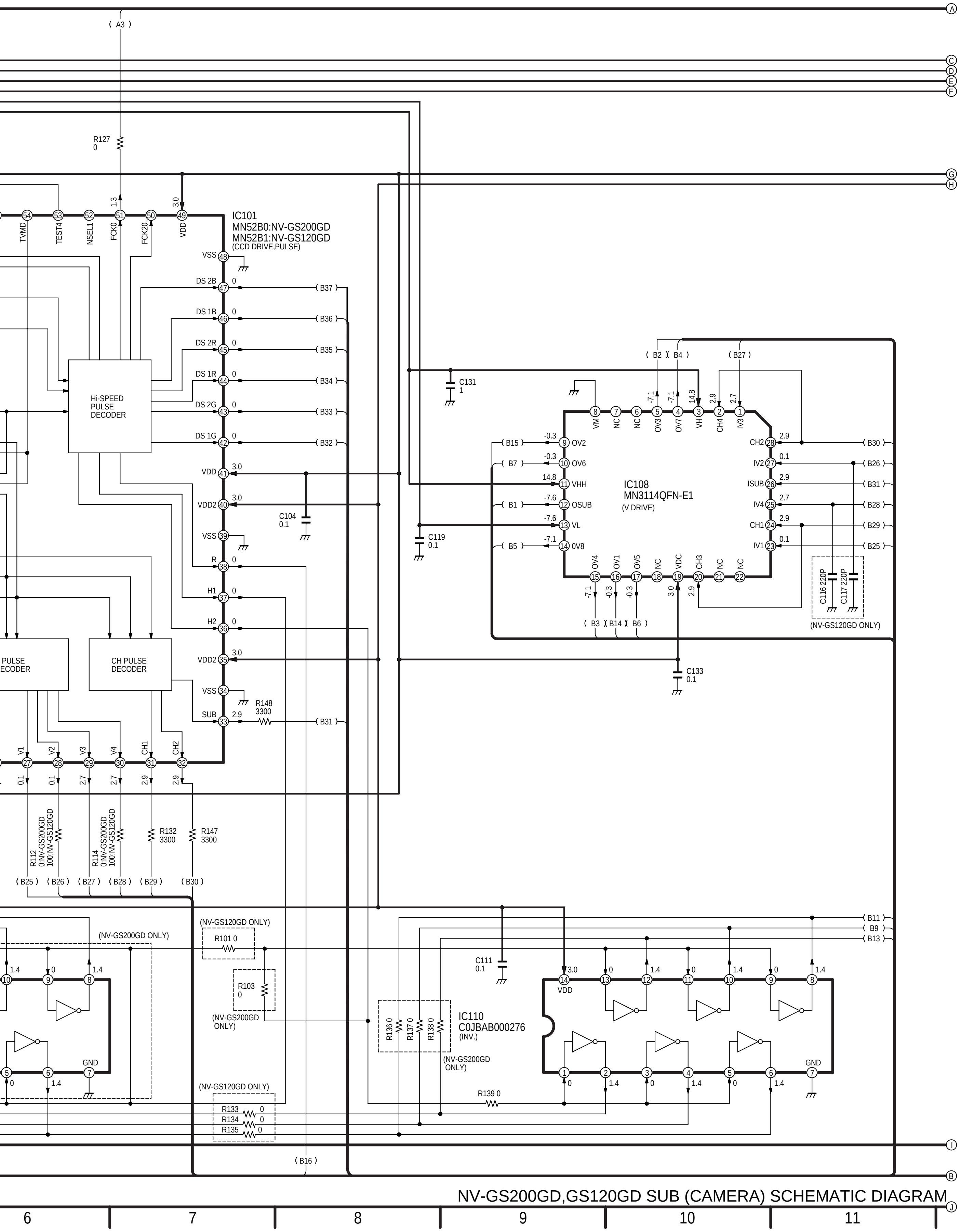
NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-GS200GD,GS120GD
SUB (LENS DRIVE) SCHEMATIC DIAGRAM

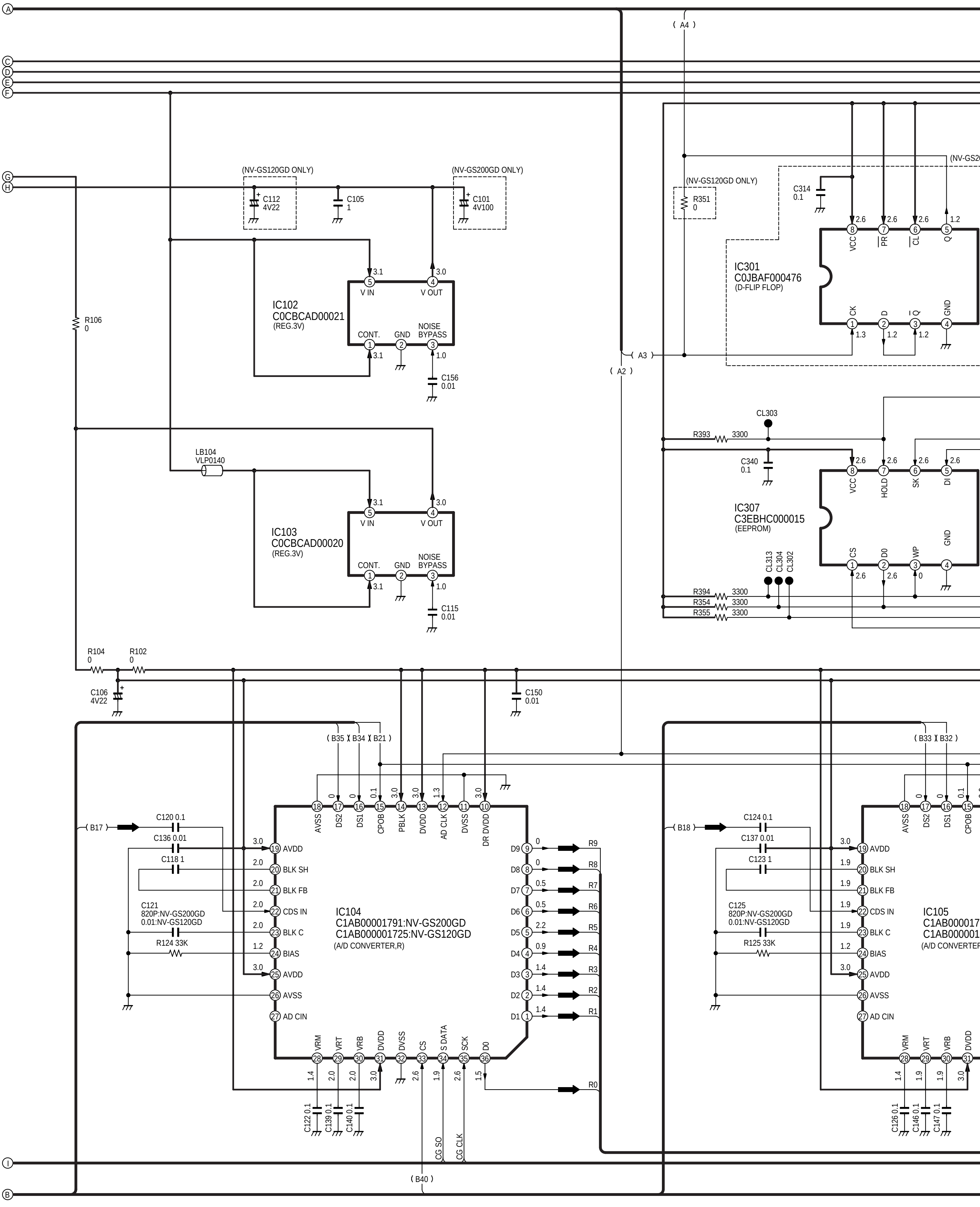
12.20. SUB (CAMERA) SCHEMATIC DIAGRAM



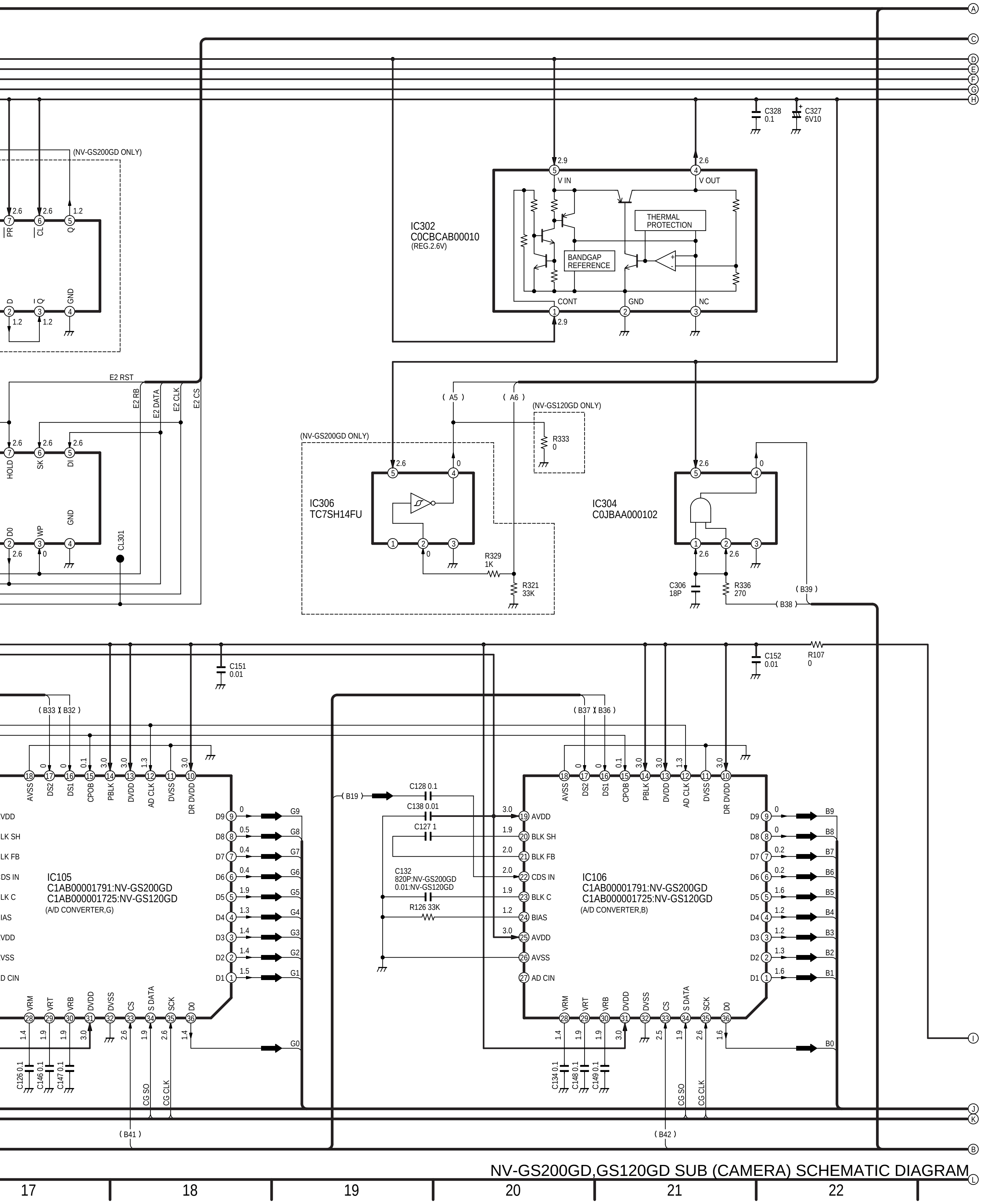
(SUB C.B.A.)
REFER TO SUB CONNECTION
TO SUB CN(D-13/E-1)
<TO POWER >
B2 REG A5V
B1 REG D3V
B30 SUB 1.8V
B76 CAM 1.5V
B31 D GND
TO SUB CN(D-13)
<TO SUB POWER >
B77 REG 3.1V
B79 CAM -7.5V
B78 CAM 15V
L101 10u
L104 10u
D102 B0JCDD000002
C143 3.3
C144 1
C142 3.3
C114 0.1
C113 4V22
(A1) (A2)
R145 0
R146 0
X101 H1A5405B0011: NV-GS200GD H1A2705B0024: NV-GS120GD
(NV-GS120GD ONLY)
QR101 UNR911NJ0L (POWER SUPPLY)
QR102 B1GBBEKM0001 (P.SUPPLY CONT.)
TO SUB CN(B-14)
<TO CONTROL >
B74 CCD STBY
R105 100K
C103 1
D101 MA6S121
R131 0
(NV-GS200GD ONLY)
L105 10u
C109 6V10
C129 20V10
R119 1M
R117 1M
R118 1M
(NV-GS120GD ONLY)
R142 3300
R141 3300
R113 3900
CG CLK
CG SO
C102 1
C107 1
C154 1
TO SUB CN(C-16/D-16/E-16)
<TO CCD>
B104 CCD 5V
B88 -8V
B85 15V
B94 SUB G
B101 SUB R
B84 SUB B
B81 V3 RB
B82 V4 RB
B89 V3 G
B90 V4 G
B91 V1 G
B92 V2 G
B95 H2 G
B96 H1 G
B97 H2 B
B98 H1 B
B99 H2 R
B100 H1 R
B102 V1 RB
B103 V2 RB
B93 R
B86 SIG R
B87 SIG G
B83 SIG B
B128 A GND
B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B14 B15 B16 B17 B18 B19
B20 B21 B22 B23 B24 B25 B26 B27
1 NC
2 NC
3 CLR
4 TEST1
5 FCK2I
6 VSS
7 VDD
8 S CLK
9 S DATA
10 SCS
11 CPOB
12 CPDM
13 NC
14 NC
15 THD
16 CCD HD
CL101
64 NC 63 TEST6 62 ADCLK2 61 TEST5 60 ADCLK1 59 NC 58 NC 57 VSS 56 VDD 55 NC 54 TVMD 53 TEST4 52 NSELI
17 VD 18 FI 19 PBLK 20 HCLR 21 NC 22 NC 23 TEST2 24 VSS 25 VDD 26 TEST3 27 V1 28 V2 29 V3
1/2f
H PULSE GEN.
H TIMING S/R
HCLR GEN.
Hi-S PUL DEC
SERIAL DATA INPUT
V TIMING S/R
PROCESS PULSE DECODER
V PULSE DECODER
R112 0:NV-GS200GD 100:NV-GS120GD
R114 0:NV-GS200GD
C108 0.1
IC107 C0JBAB000276 (INV.)
VDD GND
B10 B8 B12
G F E D C B A
1 2 3 4 5 6


IC101
MN52B0:NV-GS200GD
MN52B1:NV-GS120GD
(CCD DRIVE,PULSE)
Hi-SPEED PULSE DECODER
PULSE DECODER
CH PULSE DECODER
TVMD
TEST4
NSEL1
FCK0
FCK20
VDD
VSS
DS 2B
DS 1B
DS 2R
DS 1R
DS 2G
DS 1G
VDD2
R
H1
H2
SUB
V1
V2
V3
V4
CH1
CH2
R127 0
C104 0.1
R148 3300
R112 0:NV-GS200GD 100:NV-GS120GD
R114 0:NV-GS200GD 100:NV-GS120GD
R132 3300
R147 3300
C131 1
C119 0.1
C133 0.1
IC108
MN3114QFN-E1
(V DRIVE)
VM
NC
OV3
OV7
VH
CH4
IV3
OV2
OV6
VHH
OSUB
VL
OV8
OV4
OV1
OV5
VDC
CH3
CH2
IV2
ISUB
IV4
CH1
IV1
C116 220P
C117 220P
(NV-GS120GD ONLY)
(NV-GS200GD ONLY)
R101 0
R103 0
R133 0
R134 0
R135 0
R136 0
R137 0
R138 0
R139 0
C111 0.1
IC110
C0JBAB000276
(INV.)
GND
A3
B1
B2
B3
B4
B5
B6
B7
B9
B11
B13
B14
B15
B16
B25
B26
B27
B28
B29
B30
B31
B32
B33
B34
B35
B36
B37
A
B
C
D
E
F
G
H
I
J
6
7
8
9
10
11

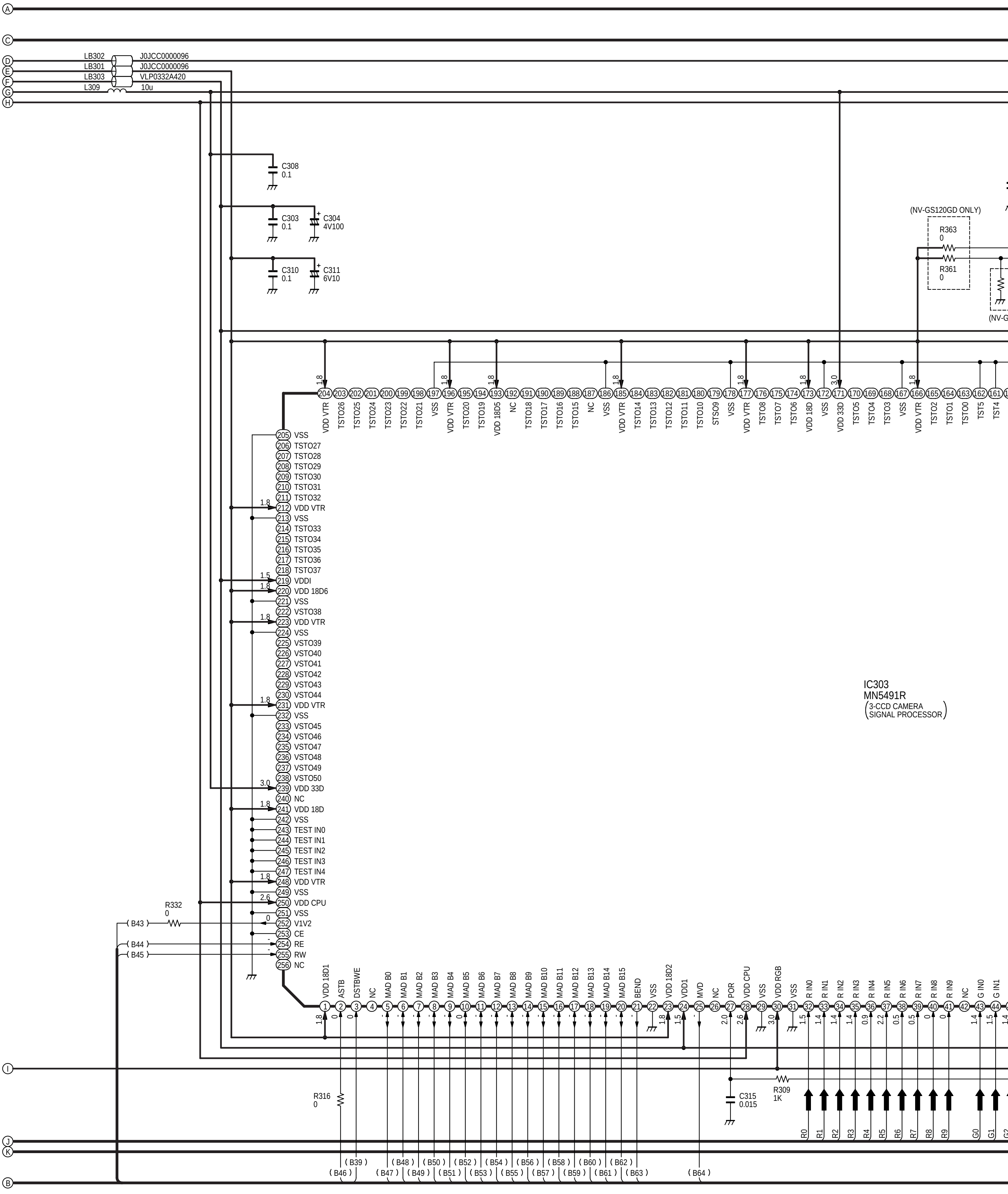
NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM


A
C
D
E
F
G
H
I
B
J
(A4)
(A3)
(A2)
(NV-GS120GD ONLY)
C112 4V22
C105 1
(NV-GS200GD ONLY)
C101 4V100
R106 0
IC102
C0CBCAD00021
(REG.3V)
V IN
V OUT
CONT.
GND
NOISE BYPASS
3.1
3.0
1.0
C156 0.01
LB104 VLP0140
IC103
C0CBCAD00020
(REG.3V)
C115 0.01
R104 0
R102 0
C106 4V22
C150 0.01
(NV-GS120GD ONLY)
R351 0
C314 0.1
(NV-GS2
IC301
C0JBAF000476
(D-FLIP FLOP)
VCC
PR
CL
Q
CK
D
Q
GND
2.6
1.2
1.3
CL303
R393 3300
C340 0.1
IC307
C3EBHC000015
(EEPROM)
VCC
HOLD
SK
DI
CS
D0
WP
GND
CL313
CL304
CL302
R394 3300
R354 3300
R355 3300
(B35)(B34)(B21)
(B17)
C120 0.1
C136 0.01
C118 1
C121 820P:NV-GS200GD 0.01:NV-GS120GD
R124 33K
AVSS
DS2
DS1
CPOB
PBLK
DVDD
AD CLK
DVSS
DR DVDD
AVDD
BLK SH
BLK FB
CDS IN
BLK C
BIAS
AVDD
AVSS
AD CIN
IC104
C1AB00001791:NV-GS200GD
C1AB000001725:NV-GS120GD
(A/D CONVERTER,R)
D9
D8
D7
D6
D5
D4
D3
D2
D1
R9
R8
R7
R6
R5
R4
R3
R2
R1
R0
VRM
VRT
VRB
DVDD
DVSS
CS
S DATA
SCK
D0
C122 0.1
C139 0.1
C140 0.1
CG SO
CG CLK
(B40)
(B33)(B32)
(B18)
C124 0.1
C137 0.01
C123 1
C125 820P:NV-GS200GD 0.01:NV-GS120GD
R125 33K
IC105
C1AB00001
C1AB00000
(A/D CONVERTER
C126 0.1
C146 0.1
C147 0.1
12
13
14
15
16
17

NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM


IC302
C0CBCAB00010
(REG.2.6V)
V IN
V OUT
THERMAL PROTECTION
BANDGAP REFERENCE
CONT
GND
NC
C328 0.1
C327 6V10
(NV-GS200GD ONLY)
(NV-GS120GD ONLY)
E2 RST
E2 RB
E2 DATA
E2 CLK
E2 CS
CL301
IC306
TC7SH14FU
R329 1K
R321 33K
R333 0
IC304
C0JBAA000102
C306 18P
R336 270
B38
B39
A5
A6
C151 0.01
C152 0.01
R107 0
B33
B32
B37
B36
B19
C128 0.1
C138 0.01
C127 1
C132
820P:NV-GS200GD
0.01:NV-GS120GD
R126 33K
IC105
C1AB00001791:NV-GS200GD
C1AB000001725:NV-GS120GD
(A/D CONVERTER,G)
IC106
C1AB00001791:NV-GS200GD
C1AB000001725:NV-GS120GD
(A/D CONVERTER,B)
AVSS
DS2
DS1
CPOB
PBLK
DVDD
AD CLK
DVSS
DR DVDD
AVDD
BLK SH
BLK FB
CDS IN
BLK C
BIAS
AD CIN
VRM
VRT
VRB
CS
S DATA
SCK
D0
G0
G1
G2
G3
G4
G5
G6
G7
G8
G9
B0
B1
B2
B3
B4
B5
B6
B7
B8
B9
C126 0.1
C146 0.1
C147 0.1
C134 0.1
C148 0.1
C149 0.1
CG SO
CG CLK
B41
B42
A
B
C
D
E
F
G
H
I
J
K
L
17
18
19
20
21
22

NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM


A
C
D
E
F
G
H
I
J
K
B
L
LB302 J0JCC0000096
LB301 J0JCC0000096
LB303 VLP0332A420
L309 10u
C308 0.1
C303 0.1
C304 4V100
C310 0.1
C311 6V10
(NV-GS120GD ONLY)
R363 0
R361 0
IC303
MN5491R
(3-CCD CAMERA SIGNAL PROCESSOR)
204 VDD VTR 1.8
203 TSTO26
202 TSTO25
201 TSTO24
200 TSTO23
199 TSTO22
198 TSTO21
197 VSS
196 VDD VTR 1.8
195 TSTO20
194 TSTO19
193 VDD 18D5 1.8
192 NC
191 TSTO18
190 TSTO17
189 TSTO16
188 TSTO15
187 NC
186 VSS
185 VDD VTR 1.8
184 TSTO14
183 TSTO13
182 TSTO12
181 TSTO11
180 TSTO10
179 STSO9
178 VSS
177 VDD VTR 1.8
176 TSTO8
175 TSTO7
174 TSTO6
173 VDD 18D 1.8
172 VSS
171 VDD 33D 3.0
170 TSTO5
169 TSTO4
168 TSTO3
167 VSS
166 VDD VTR 1.8
165 TSTO2
164 TSTO1
163 TSTO0
162 TST5
161 TST4
205 VSS
206 TSTO27
207 TSTO28
208 TSTO29
209 TSTO30
210 TSTO31
211 TSTO32
212 VDD VTR 1.8
213 VSS
214 TSTO33
215 TSTO34
216 TSTO35
217 TSTO36
218 TSTO37
219 VDDI 1.5
220 VDD 18D6 1.8
221 VSS
222 VSTO38
223 VDD VTR 1.8
224 VSS
225 VSTO39
226 VSTO40
227 VSTO41
228 VSTO42
229 VSTO43
230 VSTO44
231 VDD VTR 1.8
232 VSS
233 VSTO45
234 VSTO46
235 VSTO47
236 VSTO48
237 VSTO49
238 VSTO50
239 VDD 33D 3.0
240 NC
241 VDD 18D 1.8
242 VSS
243 TEST IN0
244 TEST IN1
245 TEST IN2
246 TEST IN3
247 TEST IN4
248 VDD VTR 1.8
249 VSS
250 VDD CPU 2.6
251 VSS
252 V1V2 0
253 CE
254 RE
255 RW
256 NC
R332 0
B43
B44
B45
1 VDD 18D1 1.8
2 ASTB 0
3 DSTBWE 0
4 NC
5 MAD B0
6 MAD B1
7 MAD B2
8 MAD B3
9 MAD B4
10 MAD B5 0
11 MAD B6
12 MAD B7
13 MAD B8
14 MAD B9
15 MAD B10
16 MAD B11
17 MAD B12
18 MAD B13
19 MAD B14
20 MAD B15
21 BEND
22 VSS
23 VDD 18D2 1.8
24 VDD1 1.5
25 MVD
26 NC
27 POR 2.0
28 VDD CPU 2.6
29 VSS
30 VDD RGB 3.0
31 VSS
32 R IN0 1.5
33 R IN1 1.4
34 R IN2 1.4
35 R IN3 1.4
36 R IN4 0.9
37 R IN5 2.2
38 R IN6 0.5
39 R IN7 0.5
40 R IN8 0
41 R IN9 0
42 NC
43 G IN0 1.4
44 G IN1 1.5
1.4
R316 0
C315 0.015
R309 1K
R0
R1
R2
R3
R4
R5
R6
R7
R8
R9
G0
G1
B39
B46
B47
B48
B49
B50
B51
B52
B53
B54
B55
B56
B57
B58
B59
B60
B61
B62
B63
B64
23
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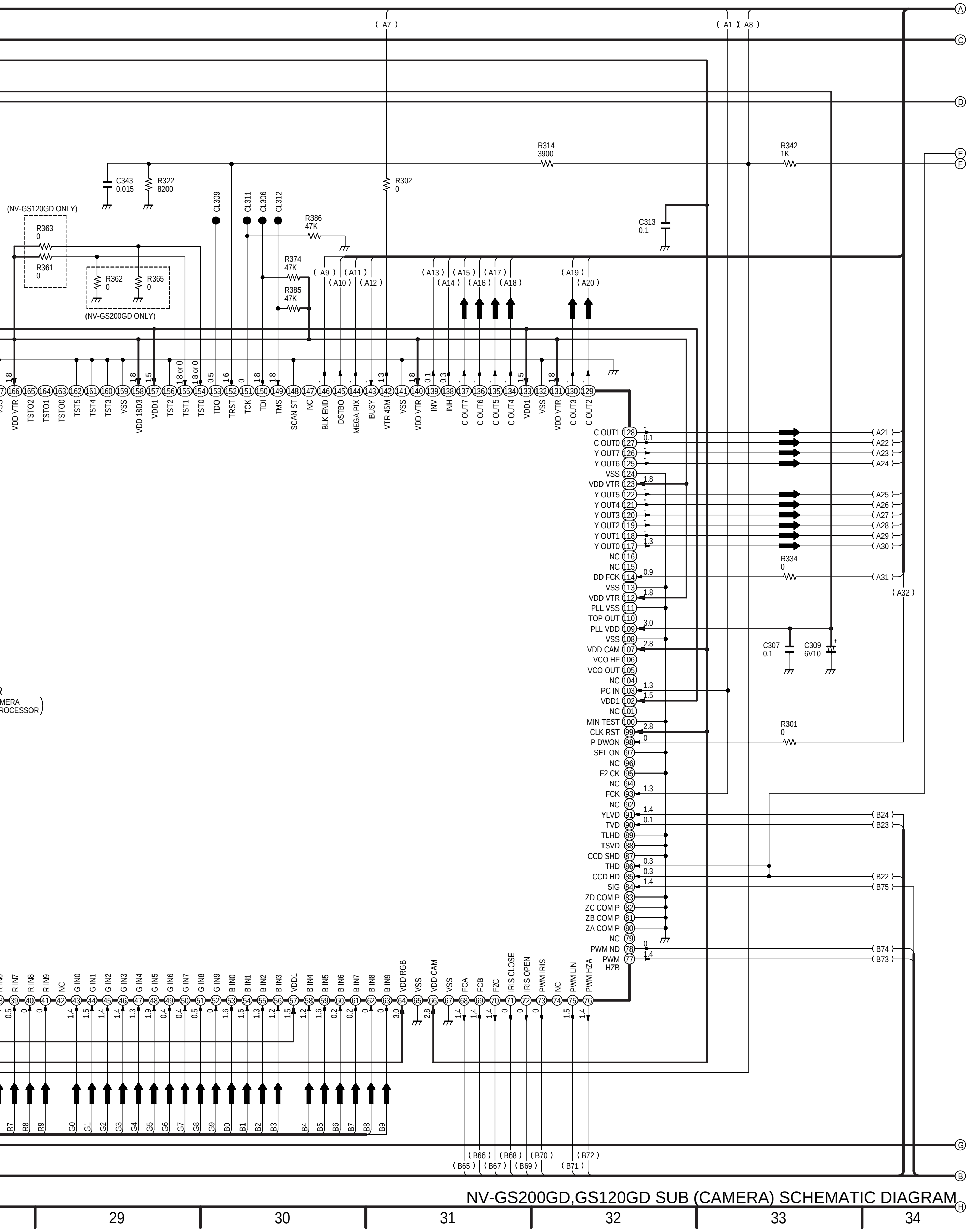
NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM


A
C
D
E
F
G
B
H
(A7)
(A1)(A8)
R314
3900
R342
1K
C343
0.015
R322
8200
R302
0
CL309
CL311
CL306
CL312
(NV-GS120GD ONLY)
R363
0
R361
0
R362
0
R365
0
(NV-GS200GD ONLY)
R386
47K
R374
47K
R385
47K
C313
0.1
(A9) (A10) (A11) (A12)
(A13) (A14) (A15) (A16) (A17) (A18)
(A19) (A20)
VDD VTR
TST02
TST01
TST00
TST5
TST4
TST3
VSS
VDD 18D3
VDD1
TST2
TST1
TST0
TDO
TRST
TCK
TDI
TMS
SCAN ST
NC
BLK END
DSTBO
MEGA PIX
BUSY
VTR 45M
VSS
VDD VTR
INV
INH
C OUT7
C OUT6
C OUT5
C OUT4
VDD1
VSS
VDD VTR
C OUT3
C OUT2
C OUT1
C OUT0
Y OUT7
Y OUT6
VSS
VDD VTR
Y OUT5
Y OUT4
Y OUT3
Y OUT2
Y OUT1
Y OUT0
NC
NC
DD FCK
VSS
VDD VTR
PLL VSS
TOP OUT
PLL VDD
VSS
VDD CAM
VCO HF
VCO OUT
NC
PC IN
VDD1
NC
MIN TEST
CLK RST
P DWON
SEL ON
NC
F2 CK
NC
FCK
NC
YLVD
TVD
TLHD
TSVD
CCD SHD
THD
CCD HD
SIG
ZD COM P
ZC COM P
ZB COM P
ZA COM P
NC
PWM ND
PWM HZB
(A21) (A22) (A23) (A24)
(A25) (A26) (A27) (A28) (A29) (A30)
R334
0
(A31)
(A32)
C307
0.1
C309
6V10
R301
0
(B24) (B23) (B22) (B75) (B74) (B73)
R
MERA
ROCESSOR
R IN7
R IN8
R IN9
NC
G IN0
G IN1
G IN2
G IN3
G IN4
G IN5
G IN6
G IN7
G IN8
G IN9
B IN0
B IN1
B IN2
B IN3
VDD1
B IN4
B IN5
B IN6
B IN7
B IN8
B IN9
VDD RGB
VSS
VDD CAM
VSS
FCA
FCB
F2C
IRIS CLOSE
IRIS OPEN
PWM IRIS
NC
PWM LIN
PWM HZA
R7
R8
R9
G0
G1
G2
G3
G4
G5
G6
G7
G8
G9
B0
B1
B2
B3
B4
B5
B6
B7
B8
B9
(B65) (B66) (B67) (B68) (B69) (B70) (B71) (B72)
29
30
31
32
33
34

NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM

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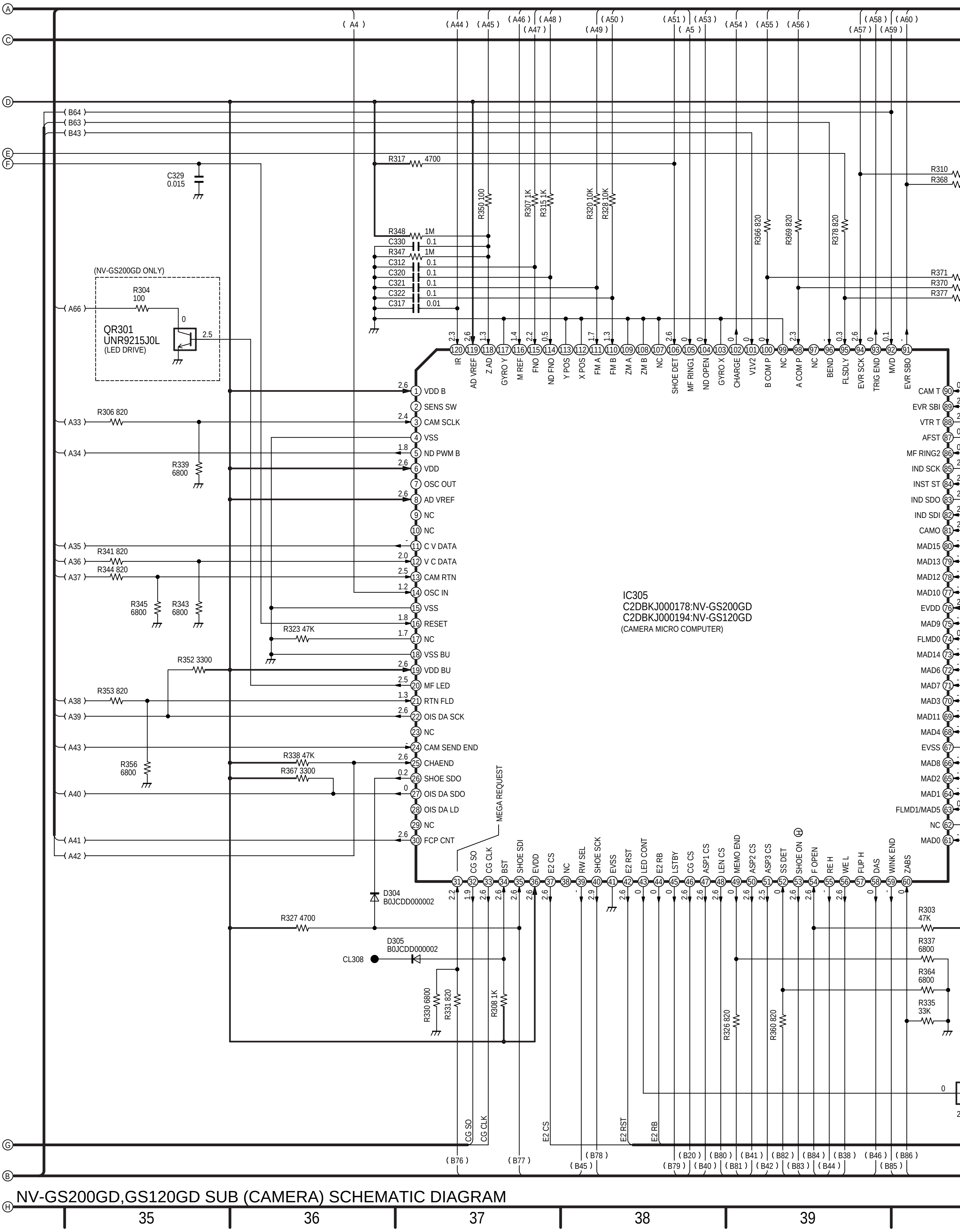
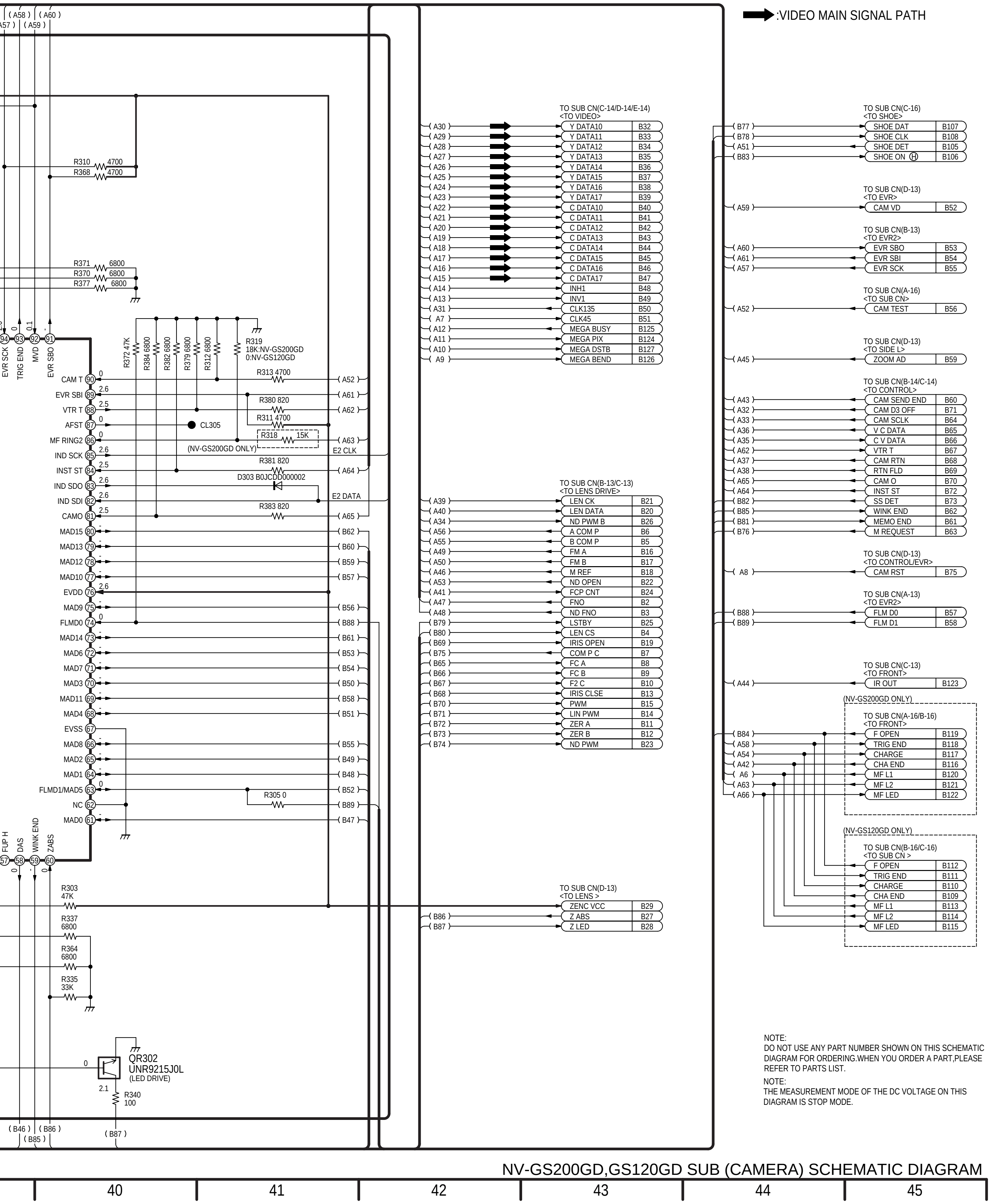

IC305
C2DBKJ000178:NV-GS200GD
C2DBKJ000194:NV-GS120GD
(CAMERA MICRO COMPUTER)
QR301
UNR9215J0L
(LED DRIVE)
(NV-GS200GD ONLY)
R304 100
C329 0.015
R317 4700
R348 1M
C330 0.1
R347 1M
C312 0.1
C320 0.1
C321 0.1
C322 0.1
C317 0.01
R350 100
R307 1K
R315 1K
R320 10K
R328 10K
R366 820
R369 820
R378 820
R310
R368
R371
R370
R377
R306 820
R339 6800
R341 820
R344 820
R345 6800
R343 6800
R323 47K
R352 3300
R353 820
R356 6800
R338 47K
R367 3300
D304 B0JCDD000002
R327 4700
D305 B0JCDD000002
CL308
R330 6800
R331 820
R308 1K
R326 820
R360 820
R303 47K
R337 6800
R364 6800
R335 33K
MEGA REQUEST
1 VDD B
2 SENS SW
3 CAM SCLK
4 VSS
5 ND PWM B
6 VDD
7 OSC OUT
8 AD VREF
9 NC
10 NC
11 C V DATA
12 V C DATA
13 CAM RTN
14 OSC IN
15 VSS
16 RESET
17 NC
18 VSS BU
19 VDD BU
20 MF LED
21 RTN FLD
22 OIS DA SCK
23 NC
24 CAM SEND END
25 CHAEND
26 SHOE SDO
27 OIS DA SDO
28 OIS DA LD
29 NC
30 FCP CNT
31 CG SO
32 CG CLK
33 BST
34 SHOE SDI
35 EVDD
36 E2 CS
37 NC
38 RW SEL
39 SHOE SCK
40 EVSS
41 E2 RST
42 LED CONT
43 E2 RB
44 LSTBY
45 CG CS
46 ASP1 CS
47 LEN CS
48 MEMO END
49 ASP2 CS
50 ASP3 CS
51 SS DET
52 SHOE ON
53 F OPEN
54 RE H
55 WE L
56 FUP H
57 DAS
58 WINK END
59 ZABS
60 MAD0
61 NC
62 FLMD1/MAD5
63 MAD1
64 MAD2
65 MAD8
66 EVSS
67 MAD4
68 MAD11
69 MAD3
70 MAD7
71 MAD6
72 MAD14
73 FLMD0
74 MAD9
75 EVDD
76 MAD10
77 MAD12
78 MAD13
79 MAD15
80 CAMO
81 IND SDI
82 IND SDO
83 INST ST
84 IND SCK
85 MF RING2
86 AFST
87 VTR T
88 EVR SBI
89 CAM T
90
91 EVR SBO
92 MVD
93 TRIG END
94 EVR SCK
95 FLSDLY
96 BEND
97 NC
98 A COM P
99 NC
100 B COM P
101 V1V2
102 CHARGE
103 GYRO X
104 ND OPEN
105 MF RING1
106 SHOE DET
107 NC
108 ZM B
109 ZM A
110 FM B
111 FM A
112 X POS
113 Y POS
114 ND FNO
115 FNO
116 M REF
117 GYRO Y
118 Z AD
119 AD VREF
120 IR
CG SO
CG CLK
E2 CS
E2 RST
E2 RB
(A4) (A44) (A45) (A46) (A47) (A48) (A49) (A50) (A51) (A5) (A53) (A54) (A55) (A56) (A57) (A58) (A59) (A60)
(B64) (B63) (B43)
(A66) (A33) (A34) (A35) (A36) (A37) (A38) (A39) (A43) (A40) (A41) (A42)
(B76) (B77) (B45) (B78) (B79) (B20) (B40) (B80) (B81) (B41) (B42) (B82) (B83) (B84) (B44) (B38) (B46) (B85) (B86)
A C D E F G B H
35 36 37 38 39

NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM


:VIDEO MAIN SIGNAL PATH
(A58) (A60)
A57) (A59)
R310 4700
R368 4700
R371 6800
R370 6800
R377 6800
EVR SCK
TRIG END
MVD
EVR SBO
R372 47K
R384 6800
R382 6800
R379 6800
R312 6800
R319
18K:NV-GS200GD
0:NV-GS120GD
R313 4700
R380 820
R311 4700
CL305
R318 15K
(NV-GS200GD ONLY)
E2 CLK
R381 820
D303 B0JCDD000002
E2 DATA
R383 820
CAM T 90
EVR SBI 89
VTR T 88
AFST 87
MF RING2 86
IND SCK 85
INST ST 84
IND SDO 83
IND SDI 82
CAMO 81
MAD15 80
MAD13 79
MAD12 78
MAD10 77
EVDD 76
MAD9 75
FLMD0 74
MAD14 73
MAD6 72
MAD7 71
MAD3 70
MAD11 69
MAD4 68
EVSS 67
MAD8 66
MAD2 65
MAD1 64
FLMD1/MAD5 63
NC 62
MAD0 61
R305 0
FUP H
DAS
WINK END
ZABS
R303 47K
R337 6800
R364 6800
R335 33K
QR302
UNR9215J0L
(LED DRIVE)
R340 100
(B46) (B86)
(B85)
(B87)
TO SUB CN(C-14/D-14/E-14)
<TO VIDEO>
Y DATA10 B32
Y DATA11 B33
Y DATA12 B34
Y DATA13 B35
Y DATA14 B36
Y DATA15 B37
Y DATA16 B38
Y DATA17 B39
C DATA10 B40
C DATA11 B41
C DATA12 B42
C DATA13 B43
C DATA14 B44
C DATA15 B45
C DATA16 B46
C DATA17 B47
INH1 B48
INV1 B49
CLK135 B50
CLK45 B51
MEGA BUSY B125
MEGA PIX B124
MEGA DSTB B127
MEGA BEND B126
TO SUB CN(B-13/C-13)
<TO LENS DRIVE>
LEN CK B21
LEN DATA B20
ND PWM B B26
A COM P B6
B COM P B5
FM A B16
FM B B17
M REF B18
ND OPEN B22
FCP CNT B24
FNO B2
ND FNO B3
LSTBY B25
LEN CS B4
IRIS OPEN B19
COM P C B7
FC A B8
FC B B9
F2 C B10
IRIS CLSE B13
PWM B15
LIN PWM B14
ZER A B11
ZER B B12
ND PWM B23
TO SUB CN(D-13)
<TO LENS >
ZENC VCC B29
Z ABS B27
Z LED B28
TO SUB CN(C-16)
<TO SHOE>
SHOE DAT B107
SHOE CLK B108
SHOE DET B105
SHOE ON H B106
TO SUB CN(D-13)
<TO EVR>
CAM VD B52
TO SUB CN(B-13)
<TO EVR2>
EVR SBO B53
EVR SBI B54
EVR SCK B55
TO SUB CN(A-16)
<TO SUB CN>
CAM TEST B56
TO SUB CN(D-13)
<TO SIDE L>
ZOOM AD B59
TO SUB CN(B-14/C-14)
<TO CONTROL>
CAM SEND END B60
CAM D3 OFF B71
CAM SCLK B64
V C DATA B65
C V DATA B66
VTR T B67
CAM RTN B68
RTN FLD B69
CAM O B70
INST ST B72
SS DET B73
WINK END B62
MEMO END B61
M REQUEST B63
TO SUB CN(D-13)
<TO CONTROL/EVR>
CAM RST B75
TO SUB CN(A-13)
<TO EVR2>
FLM D0 B57
FLM D1 B58
TO SUB CN(C-13)
<TO FRONT>
IR OUT B123
(NV-GS200GD ONLY)
TO SUB CN(A-16/B-16)
<TO FRONT>
F OPEN B119
TRIG END B118
CHARGE B117
CHA END B116
MF L1 B120
MF L2 B121
MF LED B122
(NV-GS120GD ONLY)
TO SUB CN(B-16/C-16)
<TO SUB CN >
F OPEN B112
TRIG END B111
CHARGE B110
CHA END B109
MF L1 B113
MF L2 B114
MF LED B115
40
41
42
43
44
45

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM

12.20.1. PROCESS I/O TABLE

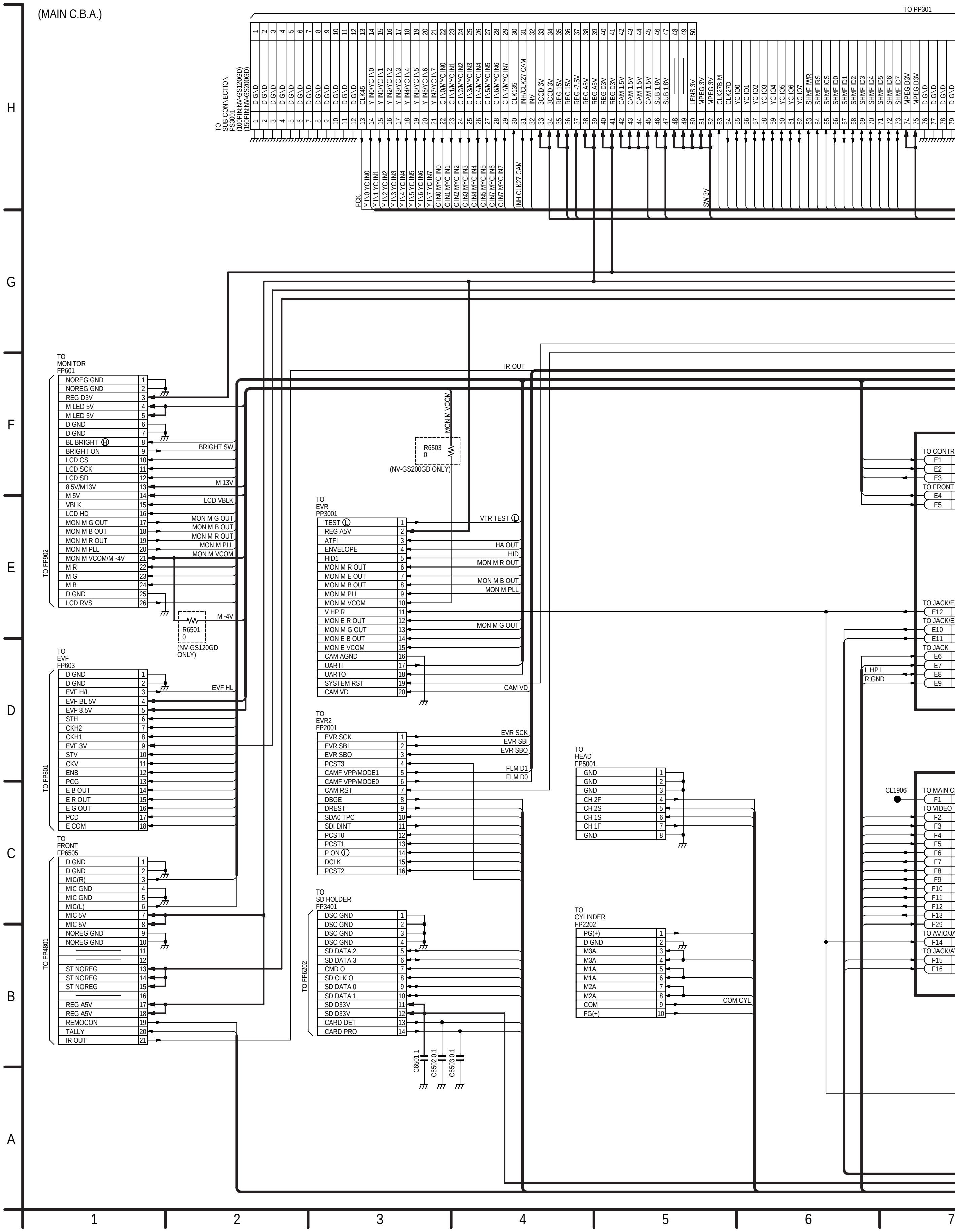
IC305 : CAMERA MICROCOMPUTER

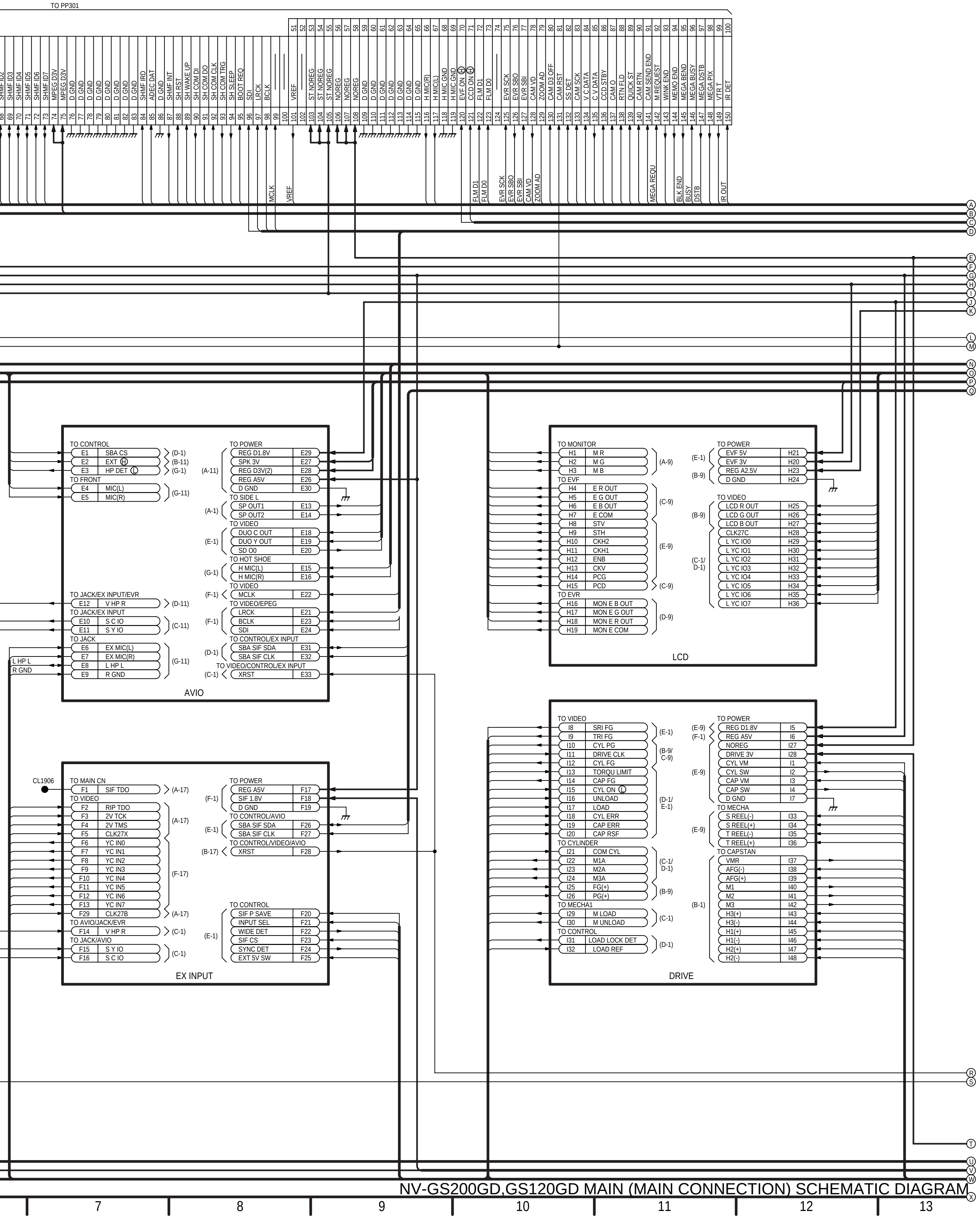
Pin No.	Signal Name	I/O	Explanation
1	VDD B	I	Votage
2	SENS SW	-	NC
3	CAM SCLK	I	Camera Serial Clock
4	VSS	-	GND
5	ND PWM B	O	ND Filter Drive
6	VDD	I	Votage
7	OSC OUT	-	NC
8	AD VREF	I	Votage
9	XT2	-	NC
10	NC	-	NC
11	C V DATA	O	Camera Serial Data Out
12	V C DATA	I	Camera Serial Data In
13	CAM RTN	I	Camera Clock Deference Signal
14	OSC IN	I	13.5MHz In
15	VSS	-	GND
16	RESET	I	Reset
17	NC	-	PULL DOWN
18	VSS BU	-	GND
19	VDD BU	I	Voltage
20	MF LED	O	LED Drive
21	RTN FLD	I	Field Detect
22	OIS DA SCK	O	OIS DAC Clock
23	NC	-	NC
24	CAM SEND END	I	CAM SEND END
25	CHA END	I	Flash Charge End
26	SHOE SDO	O	SHOE Serial Data Out
27	OIS DA SDO	O	OIS DAC Data Out
28	OIS DA LD	-	NC
29	NC	-	NC
30	FCP CNT	O	Power Supply Control
31	MEGA REQUEST	I	Mega Pixel Request
32	CG SO	O	Character Gneration Serial Data
33	CG CLK	O	Character Gneration Serial Clock
34	BST	I	Boundary Scan Test SW
35	SHOE SDI	I	SHOE Serial Data In
36	E VDD	I	Voltage
37	E2 CS	O	EEPROM Chip Select
38	NC	-	NC
39	RW SEL	O	Read/Write Select
40	SHOE SCK	O	SHOE Serial Clock
41	E VSS	-	GND
42	E2 RST	O	EEPROM Reset
43	LED CONT	O	LED Drive
44	E2 RB	O	EEPROM Ready/Busy
45	LSTBY	O	Standby
46	CG CS	O	Character Gneration Chip Select
47	ASP1 CS	O	ASP1 Chip Select
48	LEN CS	O	Lens Chip Select
49	MEMO END	O	Memory End
50	ASP2 CS	O	ASP2 Chip Select
51	ASP3 CS	O	ASP3 Chip Select
52	SS DET	I	Start/Stop Detect
53	SHOE ON Ⓗ	O	SHOE Power ON/OFF
54	F OPEN	I	Flash Open
55	RE Ⓗ	O	Read Enable ON/OFF
56	WE Ⓛ	O	Write Enable ON/OFF
57	FUP Ⓗ	-	NC
58	DAS	O	Address Strobe
59	WINK END	O	WINK END
60	Z ABS	I	Zoom Encoder

Pin No.	Signal Name	I/O	Explanation
61	MADO	I/O	Address Data
62	NC	-	NC
63	FLMD1/MAD5	I/O	Address Data
64	MAD1	I/O	Address Data
65	MAD2	I/O	Address Data
66	MAD8	I/O	Address Data
67	E VSS	-	GND
68	MAD4	I/O	Address Data
69	MAD11	I/O	Address Data
70	MAD3	I/O	Address Data
71	MAD7	I/O	Address Data
72	MAD6	I/O	Address Data
73	MAD14	I/O	Address Data
74	FLMD0	I	Flash Writing Data
75	MAD9	I/O	Address Data
76	E VDD	I	Voltage
77	MAD10	I/O	Address Data
78	MAD12	I/O	Address Data
79	MAD13	I/O	Address Data
80	MAD15	I/O	Address Data
81	CAM0	I	CAM Microcomputer Communication
82	IND SDI	I	EEPROM Serial Data In
83	IND SDO	O	EEPROM Serial Data Out
84	INST ST	I	REC ontrol
85	IND SCK	O	EEPROM Serial Clock
86	MF RING2	I	MF Ring 2
87	AFST	O	Process Timing Pulse
88	VTR T	O	Sync Serial Communication Enable
89	EVR SBI	I	EVR Serial Data In
90	CAM T	I	Camera Test
91	EVR SBO	O	EVR Serial Data Out
92	MVD	I	VD From DSP LSI
93	TRIG END	O	Flash Trigger End
94	EVR SCK	I	EVR Serial Clock
95	FLSDLY	I	Flashing Delay
96	BEND	I	Data Block End Request
97	NC	-	NC
98	A COMP	I	Linear Adjust (A COMP Capture)
99	NC	-	GND
100	B COMP	I	Linear Adjust (B COMP Capture)
101	V1V2	I	Act Detect End
102	CHARGE	O	Flash Charge
103	GYROX	-	GND
104	ND OPEN	I	ND Open
105	MF RING1	I	MF Ring 1
106	SHOE DET	I	SHOE Detect
107	NC	-	GND
108	ZM B	-	GND
109	ZM A	-	GND
110	FM B	I	Auto Forcus FG B Monitor
111	FM A	I	Auto Forcus FG A Monitor
112	XPOS	-	GND
113	YPOS	-	GND
114	ND FNO	I	ND F Value
115	FNO	I	F Value
116	M REF	I	Voltage
117	GYROY	-	GND
118	Z AD	I	Zoom Adjustment
119	AD VREF	I	Voltage
120	IR	I	IR Sensor

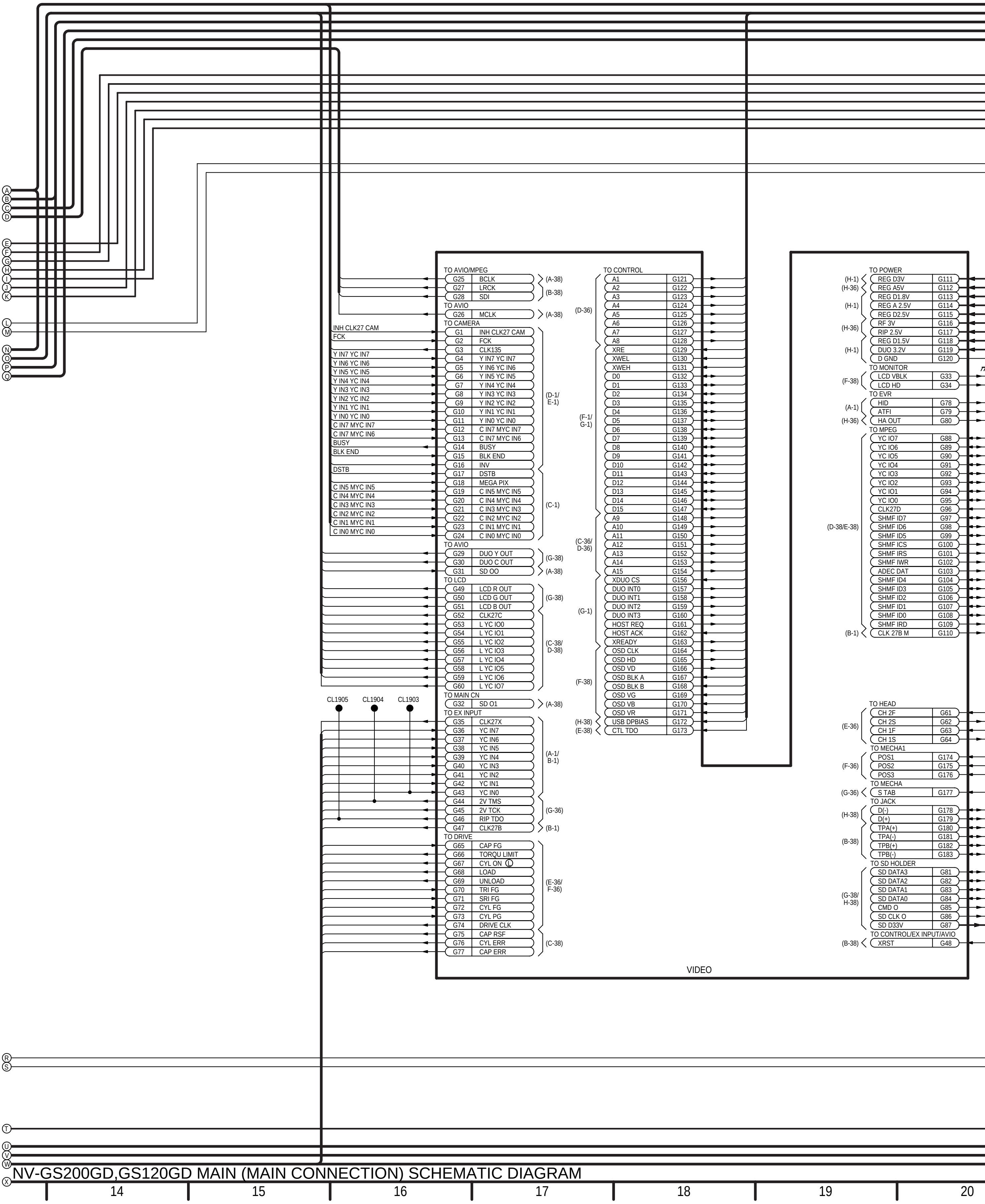
NV-GS200GD,GS120GD
CAMERA I/O TABLE

12.21. MAIN (MAIN CONNECTION) SCHEMATIC DIAGRAM


(MAIN C.B.A.)
TO PP301
TO SUB CONNECTION PS3001 (100PIN:NV-GS120GD) (150PIN:NV-GS200GD)
D GND
CLK45
Y IN0/YC IN0
Y IN1/YC IN1
Y IN2/YC IN2
Y IN3/YC IN3
Y IN4/YC IN4
Y IN5/YC IN5
Y IN6/YC IN6
Y IN7/YC IN7
C IN0/MYC IN0
C IN1/MYC IN1
C IN2/MYC IN2
C IN3/MYC IN3
C IN4/MYC IN4
C IN5/MYC IN5
C IN6/MYC IN6
C IN7/MYC IN7
CLK135
INH/CLK27 CAM
INV
3CCD 3V
REG 15V
REG -7.5V
REG A5V
REG D3V
CAM 1.5V
SUB 1.8V
LENS 3V
MPEG 3V
CLK27B M
CLK27D
YC IO0
YC IO1
YC IO2
YC IO3
YC IO4
YC IO5
YC IO6
YC IO7
SHMF IWR
SHMF IRS
SHMF ICS
SHMF ID0
SHMF ID1
SHMF ID2
SHMF ID3
SHMF ID4
SHMF ID5
SHMF ID6
SHMF ID7
MPEG D3V
FCK
Y IN0 YC IN0
Y IN1 YC IN1
Y IN2 YC IN2
Y IN3 YC IN3
Y IN4 YC IN4
Y IN5 YC IN5
Y IN6 YC IN6
Y IN7 YC IN7
C IN0 MYC IN0
C IN1 MYC IN1
C IN2 MYC IN2
C IN3 MYC IN3
C IN4 MYC IN4
C IN5 MYC IN5
C IN6 MYC IN6
C IN7 MYC IN7
INH CLK27 CAM
SW 3V
TO MONITOR FP601
NOREG GND
REG D3V
M LED 5V
D GND
BL BRIGHT Ⓗ
BRIGHT ON
LCD CS
LCD SCK
LCD SD
8.5V/M13V
M 5V
VBLK
LCD HD
MON M G OUT
MON M B OUT
MON M R OUT
MON M PLL
MON M VCOM/M -4V
M R
M G
M B
LCD RVS
TO FP902
BRIGHT SW
M 13V
LCD VBLK
MON M VCOM
M -4V
R6501 0
(NV-GS120GD ONLY)
IR OUT
R6503 0
(NV-GS200GD ONLY)
TO EVF FP603
EVF H/L
EVF BL 5V
EVF 8.5V
STH
CKH2
CKH1
EVF 3V
STV
CKV
ENB
PCG
E B OUT
E R OUT
E G OUT
PCD
E COM
TO FP801
EVF HL
TO FRONT FP6505
MIC(R)
MIC GND
MIC(L)
MIC 5V
ST NOREG
REG A5V
REMOCON
TALLY
TO FP4801
TO EVR PP3001
TEST Ⓛ
ATFI
ENVELOPE
HID1
MON M E OUT
MON E R OUT
MON E B OUT
MON E VCOM
V HP R
MON M G OUT
CAM AGND
UARTI
UARTO
SYSTEM RST
CAM VD
VTR TEST Ⓛ
HA OUT
HID
TO EVR2 FP2001
EVR SCK
EVR SBI
EVR SBO
PCST3
CAMF VPP/MODE1
CAMF VPP/MODE0
CAM RST
DBGE
DREST
SDA0 TPC
SDI DINT
PCST0
PCST1
P ON Ⓛ
DCLK
PCST2
FLM D1
FLM D0
TO SD HOLDER FP3401
DSC GND
SD DATA 2
SD DATA 3
CMD O
SD CLK O
SD DATA 0
SD DATA 1
SD D33V
CARD DET
CARD PRO
TO FP6202
C6501 1
C6502 0.1
C6503 0.1
TO HEAD FP5001
GND
CH 2F
CH 2S
CH 1S
CH 1F
TO CYLINDER FP2202
PG(+)
D GND
M3A
M1A
M2A
COM
FG(+)
COM CYL
TO CONTR
TO FRONT
E1
E2
E3
E4
E5
TO JACK/E
E12
E10
E11
TO JACK
E6
E7
E8
E9
L HP L
R GND
CL1906
TO MAIN C
TO VIDEO
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
F11
F12
F13
F29
TO AV/O/JA
F14
TO JACK/A
F15
F16
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7


TO PP301
68 SHMF ID2
69 SHMF ID3
70 SHMF ID4
71 SHMF ID5
72 SHMF ID6
73 SHMF ID7
74 MPEG D3V
75 MPEG D3V
76 D GND
77 D GND
78 D GND
79 D GND
80 D GND
81 D GND
82 D GND
83 D GND
84 SHMF IRD
85 ADEC DAT
86 D GND
87 SHMF INT
88 SH RST
89 SH WAKE UP
90 SH COM DI
91 SH COM DO
92 SH COM CLK
93 SH COM TRG
94 SH SLEEP
95 BOOT REQ
96 SDI
97 LRCK
98 BCLK
99
100
101 VREF
102
103 ST NOREG
104 ST NOREG
105 ST NOREG
106 NOREG
107 NOREG
108 NOREG
109 D GND
110 D GND
111 D GND
112 D GND
113 D GND
114 D GND
115 D GND
116 H MIC(R)
117 H MIC(L)
118 H MIC GND
119 H MIC GND
120 EVF ON H
121 CCD ON H
122 FLM D1
123 FLM D0
124
125 EVR SCK
126 EVR SBO
127 EVR SBI
128 CAM VD
129 ZOOM AD
130 CAM D3 OFF
131 CAM RST
132 SS DET
133 CAM SCK
134 V C DATA
135 C V DATA
136 CCD STBY
137 CAM O
138 RTN FLD
139 QUICK ST
140 CAM RTN
141 CAM SEND END
142 M REQUEST
143 WINK END
144 MEMO END
145 MEGA BEND
146 MEGA BUSY
147 MEGA DSTB
148 MEGA PIX
149 VTR T
150 IR DET
51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
MCLK
VREF
FLM D1
FLM D0
EVR SCK
EVR SBO
EVR SBI
CAM VD
ZOOM AD
MEGA REQU
BLK END
BUSY
DSTB
IR OUT
A B C D E F G H I J K L M N O P Q R S T U V W X
AVIO
TO CONTROL
E1 SBA CS (D-1)
E2 EXT H (B-11)
E3 HP DET L (G-1)
TO FRONT
E4 MIC(L)
E5 MIC(R) (G-11)
TO JACK/EX INPUT/EVR
E12 V HP R (D-11)
TO JACK/EX INPUT
E10 S C IO
E11 S Y IO (C-11)
TO JACK
E6 EX MIC(L)
E7 EX MIC(R)
E8 L HP L
E9 R GND (G-11)
L HP L
R GND
TO POWER
(A-11)
REG D1.8V E29
SPK 3V E27
REG D3V(2) E28
REG A5V E26
D GND E30
TO SIDE L
(A-1)
SP OUT1 E13
SP OUT2 E14
TO VIDEO
(E-1)
DUO C OUT E18
DUO Y OUT E19
SD O0 E20
TO HOT SHOE
(G-1)
H MIC(L) E15
H MIC(R) E16
TO VIDEO
(F-1) MCLK E22
TO VIDEO/EPEG
(F-1)
LRCK E21
BCLK E23
SDI E24
TO CONTROL/EX INPUT
(D-1)
SBA SIF SDA E31
SBA SIF CLK E32
TO VIDEO/CONTROL/EX INPUT
(C-1) XRST E33
EX INPUT
CL1906
TO MAIN CN
F1 SIF TDO (A-17)
TO VIDEO
F2 RIP TDO
F3 2V TCK
F4 2V TMS
F5 CLK27X (A-17)
F6 YC IN0
F7 YC IN1
F8 YC IN2
F9 YC IN3
F10 YC IN4
F11 YC IN5
F12 YC IN6
F13 YC IN7 (F-17)
F29 CLK27B (A-17)
TO AVIO/JACK/EVR
F14 V HP R (C-1)
TO JACK/AVIO
F15 S Y IO
F16 S C IO (C-1)
TO POWER
(F-1)
REG A5V F17
SIF 1.8V F18
D GND F19
TO CONTROL/AVIO
(E-1)
SBA SIF SDA F26
SBA SIF CLK F27
TO CONTROL/VIDEO/AVIO
(B-17) XRST F28
TO CONTROL
(E-1)
SIF P SAVE F20
INPUT SEL F21
WIDE DET F22
SIF CS F23
SYNC DET F24
EXT 5V SW F25
LCD
TO MONITOR
H1 M R
H2 M G
H3 M B (A-9)
TO EVF
H4 E R OUT
H5 E G OUT
H6 E B OUT
H7 E COM (C-9)
H8 STV
H9 STH
H10 CKH2
H11 CKH1
H12 ENB
H13 CKV
H14 PCG (E-9)
H15 PCD (C-9)
TO EVR
H16 MON E B OUT
H17 MON E G OUT
H18 MON E R OUT
H19 MON E COM (D-9)
TO POWER
(E-1)
EVF 5V H21
EVF 3V H20
(B-9)
REG A2.5V H23
D GND H24
TO VIDEO
(B-9)
LCD R OUT H25
LCD G OUT H26
LCD B OUT H27
CLK27C H28
(C-1/ D-1)
L YC IO0 H29
L YC IO1 H30
L YC IO2 H31
L YC IO3 H32
L YC IO4 H33
L YC IO5 H34
L YC IO6 H35
L YC IO7 H36
DRIVE
TO VIDEO
I8 SRI FG
I9 TRI FG (E-1)
I10 CYL PG
I11 DRIVE CLK (B-9/ C-9)
I12 CYL FG
I13 TORQU LIMIT
I14 CAP FG
I15 CYL ON L
I16 UNLOAD (D-1/ E-1)
I17 LOAD
I18 CYL ERR
I19 CAP ERR
I20 CAP RSF
TO CYLINDER
I21 COM CYL
I22 M1A
I23 M2A (C-1/ D-1)
I24 M3A
I25 FG(+)
I26 PG(+) (B-9)
TO MECHA1
I29 M LOAD
I30 M UNLOAD (C-1)
TO CONTROL
I31 LOAD LOCK DET
I32 LOAD REF (D-1)
TO POWER
(E-9) REG D1.8V I5
(F-1) REG A5V I6
NOREG I27
DRIVE 3V I28
CYL VM I1
(E-9) CYL SW I2
CAP VM I3
CAP SW I4
D GND I7
TO MECHA
(E-9)
S REEL(-) I33
S REEL(+) I34
T REEL(-) I35
T REEL(+) I36
TO CAPSTAN
VMR I37
AFG(-) I38
AFG(+) I39
M1 I40
(B-1) M2 I41
M3 I42
H3(+) I43
H3(-) I44
H1(+) I45
H1(-) I46
H2(+) I47
H2(-) I48
7 8 9 10 11 12 13

NV-GS200GD,GS120GD MAIN (MAIN CONNECTION) SCHEMATIC DIAGRAM


A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
TO AVIO/MPEG
G25 BCLK
G27 LRCK
G28 SDI
(A-38)
(B-38)
TO AVIO
G26 MCLK
(A-38)
TO CAMERA
INH CLK27 CAM
FCK
Y IN7 YC IN7
Y IN6 YC IN6
Y IN5 YC IN5
Y IN4 YC IN4
Y IN3 YC IN3
Y IN2 YC IN2
Y IN1 YC IN1
Y IN0 YC IN0
C IN7 MYC IN7
C IN7 MYC IN6
BUSY
BLK END
DSTB
C IN5 MYC IN5
C IN4 MYC IN4
C IN3 MYC IN3
C IN2 MYC IN2
C IN1 MYC IN1
C IN0 MYC IN0
G1 INH CLK27 CAM
G2 FCK
G3 CLK135
G4 Y IN7 YC IN7
G5 Y IN6 YC IN6
G6 Y IN5 YC IN5
G7 Y IN4 YC IN4
G8 Y IN3 YC IN3
G9 Y IN2 YC IN2
G10 Y IN1 YC IN1
G11 Y IN0 YC IN0
G12 C IN7 MYC IN7
G13 C IN7 MYC IN6
G14 BUSY
G15 BLK END
G16 INV
G17 DSTB
G18 MEGA PIX
G19 C IN5 MYC IN5
G20 C IN4 MYC IN4
G21 C IN3 MYC IN3
G22 C IN2 MYC IN2
G23 C IN1 MYC IN1
G24 C IN0 MYC IN0
(D-1/ E-1)
(C-1)
TO AVIO
G29 DUO Y OUT
G30 DUO C OUT
G31 SD OO
(G-38)
(A-38)
TO LCD
G49 LCD R OUT
G50 LCD G OUT
G51 LCD B OUT
G52 CLK27C
G53 L YC IO0
G54 L YC IO1
G55 L YC IO2
G56 L YC IO3
G57 L YC IO4
G58 L YC IO5
G59 L YC IO6
G60 L YC IO7
(G-38)
(C-38/ D-38)
TO MAIN CN
G32 SD O1
(A-38)
TO EX INPUT
CL1905
CL1904
CL1903
G35 CLK27X
G36 YC IN7
G37 YC IN6
G38 YC IN5
G39 YC IN4
G40 YC IN3
G41 YC IN2
G42 YC IN1
G43 YC IN0
G44 2V TMS
G45 2V TCK
G46 RIP TDO
G47 CLK27B
(A-1/ B-1)
(G-36)
(B-1)
TO DRIVE
G65 CAP FG
G66 TORQU LIMIT
G67 CYL ON
G68 LOAD
G69 UNLOAD
G70 TRI FG
G71 SRI FG
G72 CYL FG
G73 CYL PG
G74 DRIVE CLK
G75 CAP RSF
G76 CYL ERR
G77 CAP ERR
(E-36/ F-36)
(C-38)
TO CONTROL
A1 G121
A2 G122
A3 G123
A4 G124
A5 G125
A6 G126
A7 G127
A8 G128
XRE G129
XWEL G130
XWEH G131
D0 G132
D1 G133
D2 G134
D3 G135
D4 G136
D5 G137
D6 G138
D7 G139
D8 G140
D9 G141
D10 G142
D11 G143
D12 G144
D13 G145
D14 G146
D15 G147
A9 G148
A10 G149
A11 G150
A12 G151
A13 G152
A14 G153
A15 G154
XDUO CS G156
DUO INT0 G157
DUO INT1 G158
DUO INT2 G159
DUO INT3 G160
HOST REQ G161
HOST ACK G162
XREADY G163
OSD CLK G164
OSD HD G165
OSD VD G166
OSD BLK A G167
OSD BLK B G168
OSD VG G169
OSD VB G170
OSD VR G171
USB DPBIAS G172
CTL TDO G173
(D-36)
(F-1/ G-1)
(C-36/ D-36)
(G-1)
(F-38)
(H-38)
(E-38)
TO POWER
REG D3V G111
REG A5V G112
REG D1.8V G113
REG A 2.5V G114
REG D2.5V G115
RF 3V G116
RIP 2.5V G117
REG D1.5V G118
DUO 3.2V G119
D GND G120
(H-1)
(H-36)
(H-1)
(H-36)
(H-1)
TO MONITOR
LCD VBLK G33
LCD HD G34
(F-38)
TO EVR
HID G78
ATFI G79
HA OUT G80
(A-1)
(H-36)
TO MPEG
YC IO7 G88
YC IO6 G89
YC IO5 G90
YC IO4 G91
YC IO3 G92
YC IO2 G93
YC IO1 G94
YC IO0 G95
CLK27D G96
SHMF ID7 G97
SHMF ID6 G98
SHMF ID5 G99
SHMF ICS G100
SHMF IRS G101
SHMF IWR G102
ADEC DAT G103
SHMF ID4 G104
SHMF ID3 G105
SHMF ID2 G106
SHMF ID1 G107
SHMF ID0 G108
SHMF IRD G109
CLK 27B M G110
(D-38/E-38)
(B-1)
TO HEAD
CH 2F G61
CH 2S G62
CH 1F G63
CH 1S G64
(E-36)
TO MECHA1
POS1 G174
POS2 G175
POS3 G176
(F-36)
TO MECHA
S TAB G177
(G-36)
TO JACK
D(-) G178
D(+) G179
TPA(+) G180
TPA(-) G181
TPB(+) G182
TPB(-) G183
(H-38)
(B-38)
TO SD HOLDER
SD DATA3 G81
SD DATA2 G82
SD DATA1 G83
SD DATA0 G84
CMD O G85
SD CLK O G86
SD D33V G87
(G-38/ H-38)
TO CONTROL/EX INPUT/AVIO
XRST G48
(B-38)
VIDEO
14
15
16
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18
19
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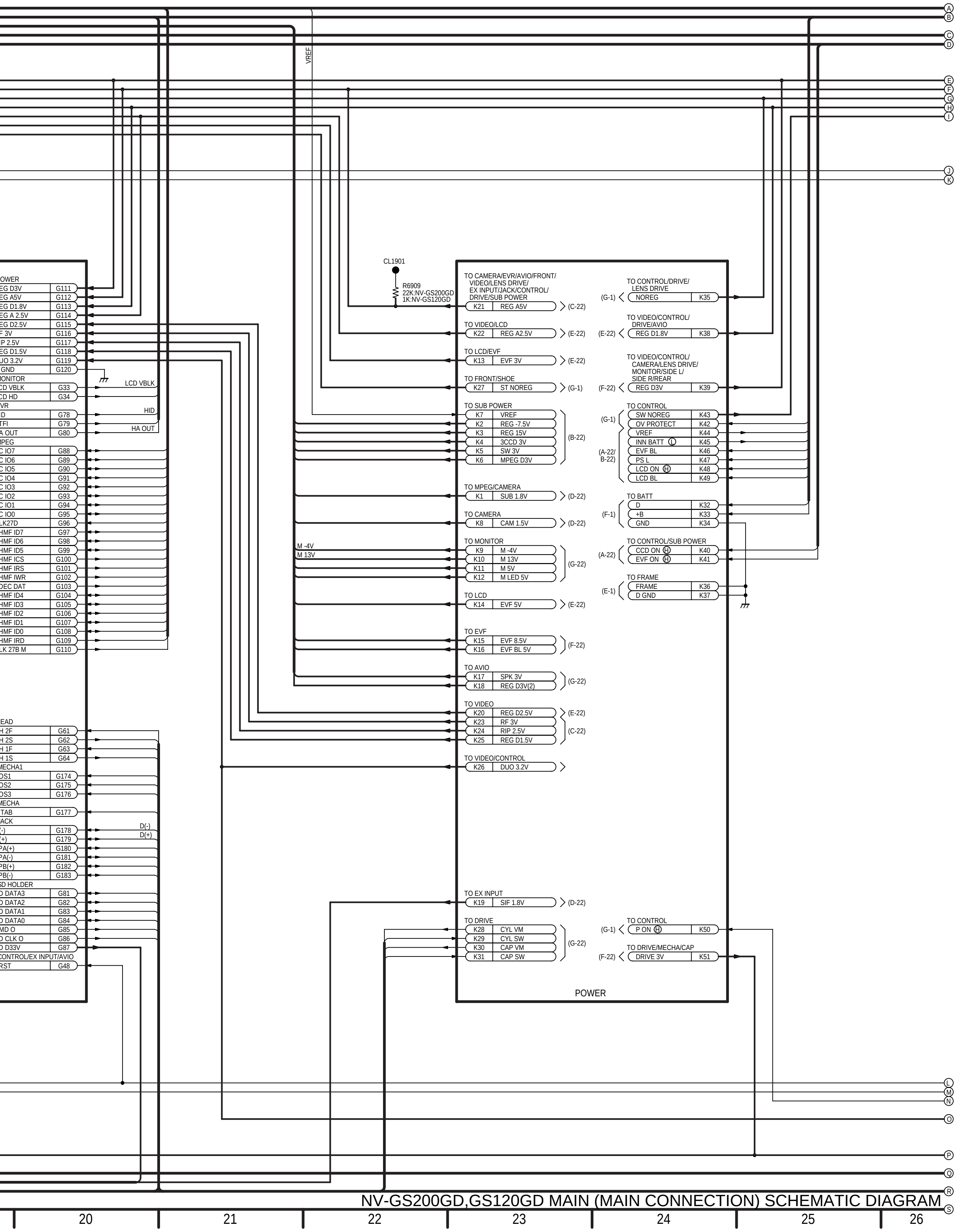
NV-GS200GD,GS120GD MAIN (MAIN CONNECTION) SCHEMATIC DIAGRAM


VREF
CL1901
R6909
22K:NV-GS200GD
1K:NV-GS120GD
OWER
EG D3V G111
EG A5V G112
EG D1.8V G113
EG A 2.5V G114
EG D2.5V G115
F 3V G116
P 2.5V G117
EG D1.5V G118
UO 3.2V G119
GND G120
ONITOR
CD VBLK G33
CD HD G34
VR
D G78
TFI G79
A OUT G80
PEG
C IO7 G88
C IO6 G89
C IO5 G90
C IO4 G91
C IO3 G92
C IO2 G93
C IO1 G94
C IO0 G95
LK27D G96
HMF ID7 G97
HMF ID6 G98
HMF ID5 G99
HMF ICS G100
HMF IRS G101
HMF IWR G102
DEC DAT G103
HMF ID4 G104
HMF ID3 G105
HMF ID2 G106
HMF ID1 G107
HMF ID0 G108
HMF IRD G109
LK 27B M G110
LCD VBLK
HID
HA OUT
EAD
H 2F G61
H 2S G62
H 1F G63
H 1S G64
MECHA1
OS1 G174
OS2 G175
OS3 G176
MECHA
TAB G177
ACK
-) G178
+) G179
PA(+) G180
PA(-) G181
PB(+) G182
PB(-) G183
SD HOLDER
D DATA3 G81
D DATA2 G82
D DATA1 G83
D DATA0 G84
MD O G85
D CLK O G86
D D33V G87
CONTROL/EX INPUT/AVIO
RST G48
D(-)
D(+)
M -4V
M 13V
TO CAMERA/EVR/AVIO/FRONT/ VIDEO/LENS DRIVE/ EX INPUT/JACK/CONTROL/ DRIVE/SUB POWER
K21 REG A5V (C-22)
TO VIDEO/LCD
K22 REG A2.5V (E-22)
TO LCD/EVF
K13 EVF 3V (E-22)
TO FRONT/SHOE
K27 ST NOREG (G-1)
TO SUB POWER
K7 VREF
K2 REG -7.5V
K3 REG 15V
K4 3CCD 3V
K5 SW 3V
K6 MPEG D3V
(B-22)
TO MPEG/CAMERA
K1 SUB 1.8V (D-22)
TO CAMERA
K8 CAM 1.5V (D-22)
TO MONITOR
K9 M -4V
K10 M 13V
K11 M 5V
K12 M LED 5V
(G-22)
TO LCD
K14 EVF 5V (E-22)
TO EVF
K15 EVF 8.5V
K16 EVF BL 5V
(F-22)
TO AVIO
K17 SPK 3V
K18 REG D3V(2)
(G-22)
TO VIDEO
K20 REG D2.5V (E-22)
K23 RF 3V
K24 RIP 2.5V
K25 REG D1.5V
(C-22)
TO VIDEO/CONTROL
K26 DUO 3.2V
TO EX INPUT
K19 SIF 1.8V (D-22)
TO DRIVE
K28 CYL VM
K29 CYL SW
K30 CAP VM
K31 CAP SW
(G-22)
TO CONTROL/DRIVE/ LENS DRIVE
(G-1) NOREG K35
TO VIDEO/CONTROL/ DRIVE/AVIO
(E-22) REG D1.8V K38
TO VIDEO/CONTROL/ CAMERA/LENS DRIVE/ MONITOR/SIDE L/ SIDE R/REAR
(F-22) REG D3V K39
TO CONTROL
(G-1)
SW NOREG K43
OV PROTECT K42
VREF K44
INN BATT Ⓛ K45
EVF BL K46
PS L K47
LCD ON Ⓗ K48
LCD BL K49
(A-22/ B-22)
TO BATT
(F-1)
D K32
+B K33
GND K34
TO CONTROL/SUB POWER
(A-22)
CCD ON Ⓗ K40
EVF ON Ⓗ K41
TO FRAME
(E-1)
FRAME K36
D GND K37
TO CONTROL
(G-1) P ON Ⓗ K50
TO DRIVE/MECHA/CAP
(F-22) DRIVE 3V K51
POWER
Ⓐ
Ⓑ
Ⓒ
Ⓓ
Ⓔ
Ⓕ
Ⓖ
Ⓗ
Ⓘ
Ⓙ
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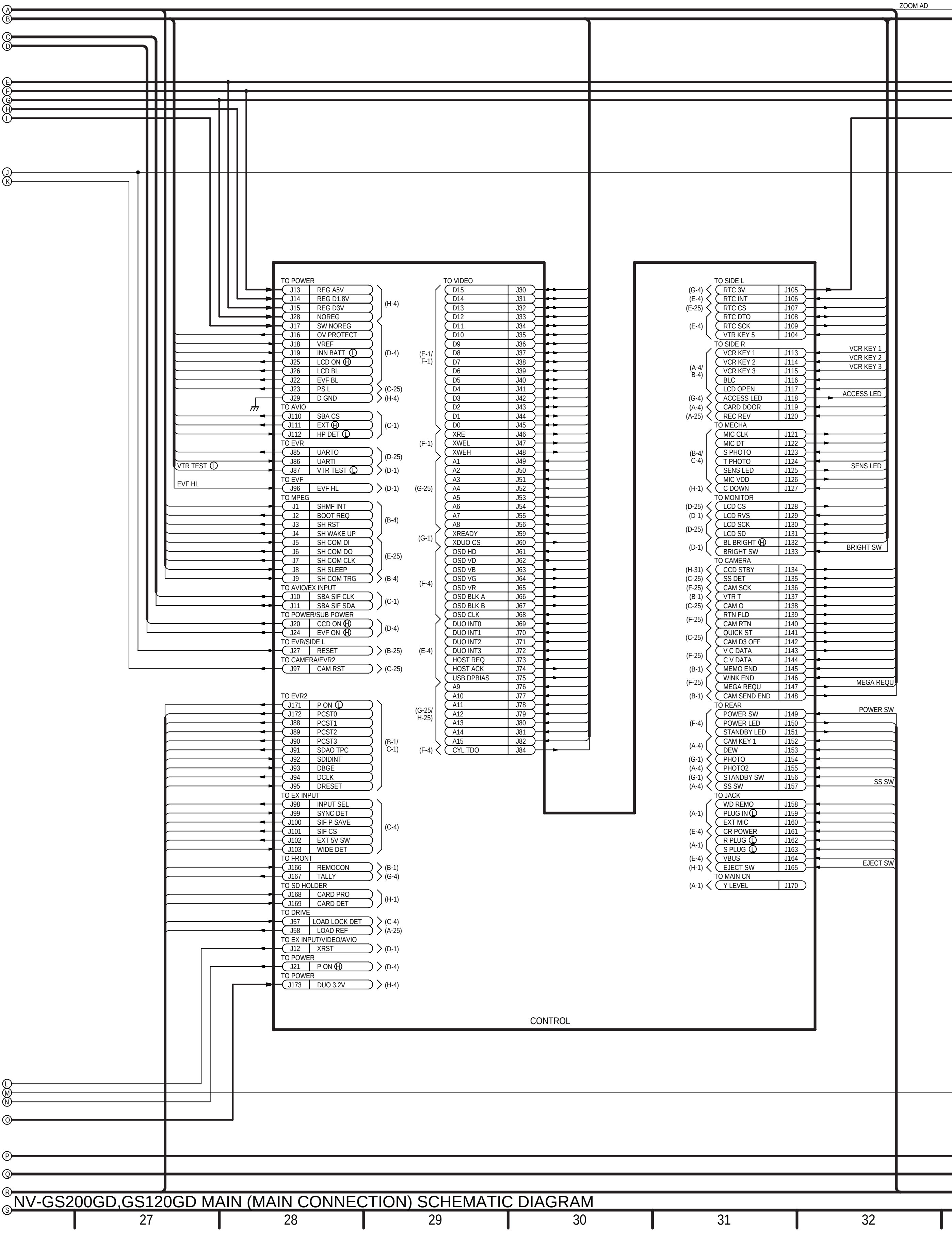
NV-GS200GD,GS120GD MAIN (MAIN CONNECTION) SCHEMATIC DIAGRAM


Ⓐ
Ⓑ
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Ⓔ
Ⓕ
Ⓖ
Ⓗ
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Ⓙ
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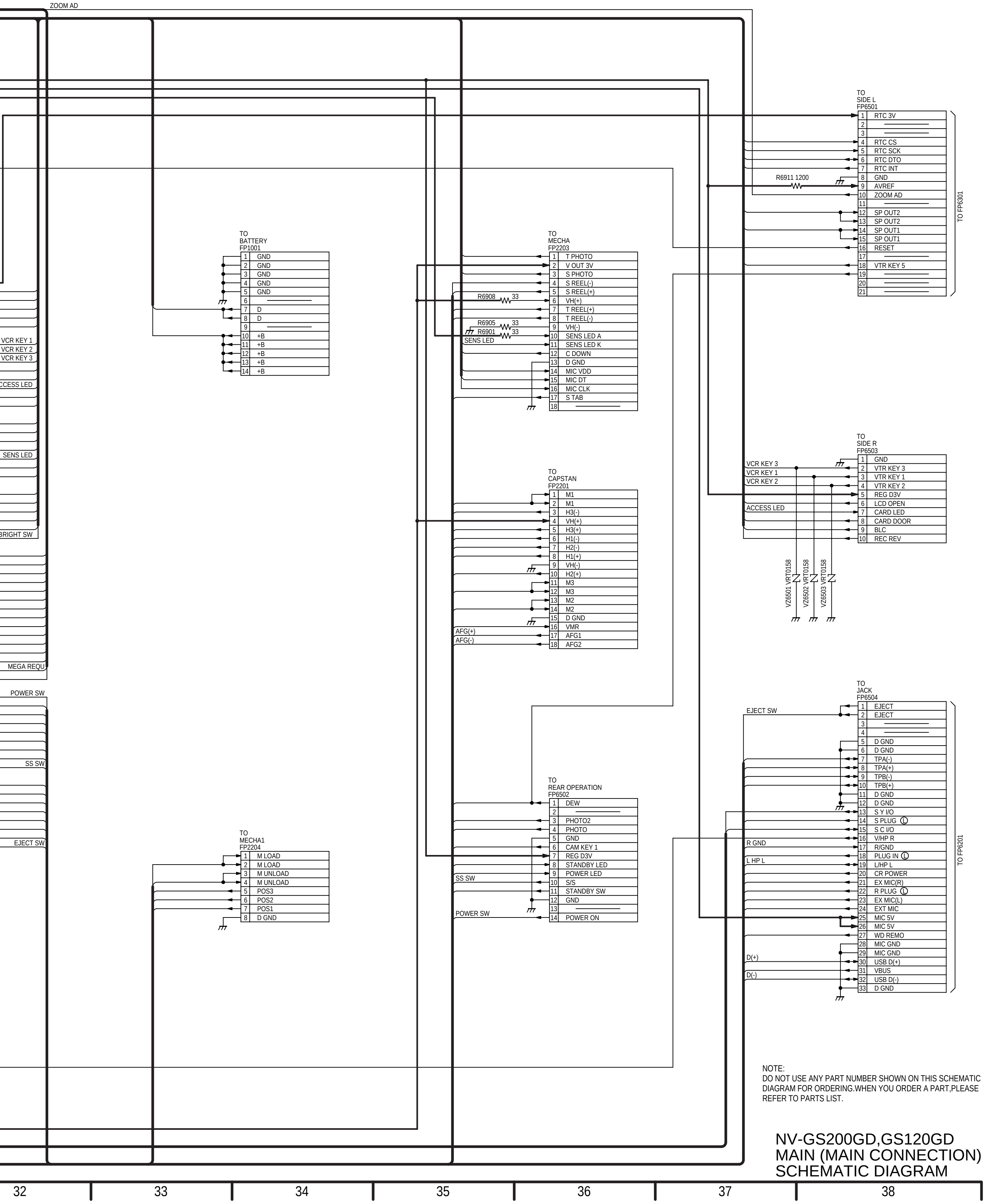
Ⓛ
Ⓜ
Ⓝ
Ⓞ
Ⓟ
Ⓠ
Ⓡ
Ⓢ
ZOOM AD
VTR TEST Ⓛ
EVF HL
TO POWER
J13 REG A5V
J14 REG D1.8V
J15 REG D3V
J28 NOREG
J17 SW NOREG
J16 OV PROTECT
J18 VREF
J19 INN BATT Ⓛ
J25 LCD ON Ⓗ
J26 LCD BL
J22 EVF BL
J23 PS L
J29 D GND
(H-4)
(D-4)
(C-25)
(H-4)
TO AVIO
J110 SBA CS
J111 EXT Ⓗ
J112 HP DET Ⓛ
(C-1)
TO EVR
J85 UARTO
J86 UARTI
J87 VTR TEST Ⓛ
(D-25)
(D-1)
TO EVF
J96 EVF HL
(D-1)
TO MPEG
J1 SHMF INT
J2 BOOT REQ
J3 SH RST
J4 SH WAKE UP
J5 SH COM DI
J6 SH COM DO
J7 SH COM CLK
J8 SH SLEEP
J9 SH COM TRG
(B-4)
(E-25)
(B-4)
TO AVIO/EX INPUT
J10 SBA SIF CLK
J11 SBA SIF SDA
(C-1)
TO POWER/SUB POWER
J20 CCD ON Ⓗ
J24 EVF ON Ⓗ
(D-4)
TO EVR/SIDE L
J27 RESET
(B-25)
TO CAMERA/EVR2
J97 CAM RST
(C-25)
TO EVR2
J171 P ON Ⓛ
J172 PCST0
J88 PCST1
J89 PCST2
J90 PCST3
J91 SDAO TPC
J92 SDIDINT
J93 DBGE
J94 DCLK
J95 DRESET
(B-1/
C-1)
TO EX INPUT
J98 INPUT SEL
J99 SYNC DET
J100 SIF P SAVE
J101 SIF CS
J102 EXT 5V SW
J103 WIDE DET
(C-4)
TO FRONT
J166 REMOCON
J167 TALLY
(B-1)
(G-4)
TO SD HOLDER
J168 CARD PRO
J169 CARD DET
(H-1)
TO DRIVE
J57 LOAD LOCK DET
J58 LOAD REF
(C-4)
(A-25)
TO EX INPUT/VIDEO/AVIO
J12 XRST
(D-1)
TO POWER
J21 P ON Ⓗ
(D-4)
TO POWER
J173 DUO 3.2V
(H-4)
TO VIDEO
D15 J30
D14 J31
D13 J32
D12 J33
D11 J34
D10 J35
D9 J36
D8 J37
D7 J38
D6 J39
D5 J40
D4 J41
D3 J42
D2 J43
D1 J44
D0 J45
XRE J46
XWEL J47
XWEH J48
A1 J49
A2 J50
A3 J51
A4 J52
A5 J53
A6 J54
A7 J55
A8 J56
XREADY J59
XDUO CS J60
OSD HD J61
OSD VD J62
OSD VB J63
OSD VG J64
OSD VR J65
OSD BLK A J66
OSD BLK B J67
OSD CLK J68
DUO INT0 J69
DUO INT1 J70
DUO INT2 J71
DUO INT3 J72
HOST REQ J73
HOST ACK J74
USB DPBIAS J75
A9 J76
A10 J77
A11 J78
A12 J79
A13 J80
A14 J81
A15 J82
CYL TDO J84
(E-1/
F-1)
(F-1)
(G-25)
(G-1)
(F-4)
(E-4)
(G-25/
H-25)
(F-4)
TO SIDE L
(G-4) RTC 3V J105
(E-4) RTC INT J106
(E-25) RTC CS J107
RTC DTO J108
(E-4) RTC SCK J109
VTR KEY 5 J104
TO SIDE R
VCR KEY 1 J113
VCR KEY 2 J114
VCR KEY 3 J115
BLC J116
LCD OPEN J117
(A-4/
B-4)
(G-4) ACCESS LED J118
(A-4) CARD DOOR J119
(A-25) REC REV J120
TO MECHA
MIC CLK J121
MIC DT J122
S PHOTO J123
T PHOTO J124
SENS LED J125
MIC VDD J126
(B-4/
C-4)
(H-1) C DOWN J127
TO MONITOR
(D-25) LCD CS J128
(D-1) LCD RVS J129
LCD SCK J130
LCD SD J131
(D-25)
BL BRIGHT Ⓗ J132
BRIGHT SW J133
(D-1)
TO CAMERA
(H-31) CCD STBY J134
(C-25) SS DET J135
(F-25) CAM SCK J136
(B-1) VTR T J137
(C-25) CAM O J138
RTN FLD J139
CAM RTN J140
(F-25)
QUICK ST J141
CAM D3 OFF J142
(C-25)
V C DATA J143
C V DATA J144
(F-25)
(B-1) MEMO END J145
WINK END J146
MEGA REQU J147
(F-25)
(B-1) CAM SEND END J148
TO REAR
POWER SW J149
POWER LED J150
STANDBY LED J151
(F-4)
CAM KEY 1 J152
DEW J153
(A-4)
(G-1) PHOTO J154
(A-4) PHOTO2 J155
(G-1) STANDBY SW J156
(A-4) SS SW J157
TO JACK
WD REMO J158
PLUG IN Ⓛ J159
EXT MIC J160
(A-1)
(E-4) CR POWER J161
R PLUG Ⓛ J162
S PLUG Ⓛ J163
(A-1)
(E-4) VBUS J164
(H-1) EJECT SW J165
TO MAIN CN
(A-1) Y LEVEL J170
VCR KEY 1
VCR KEY 2
VCR KEY 3
ACCESS LED
SENS LED
BRIGHT SW
MEGA REQU
POWER SW
SS SW
EJECT SW
CONTROL
27
28
29
30
31
32

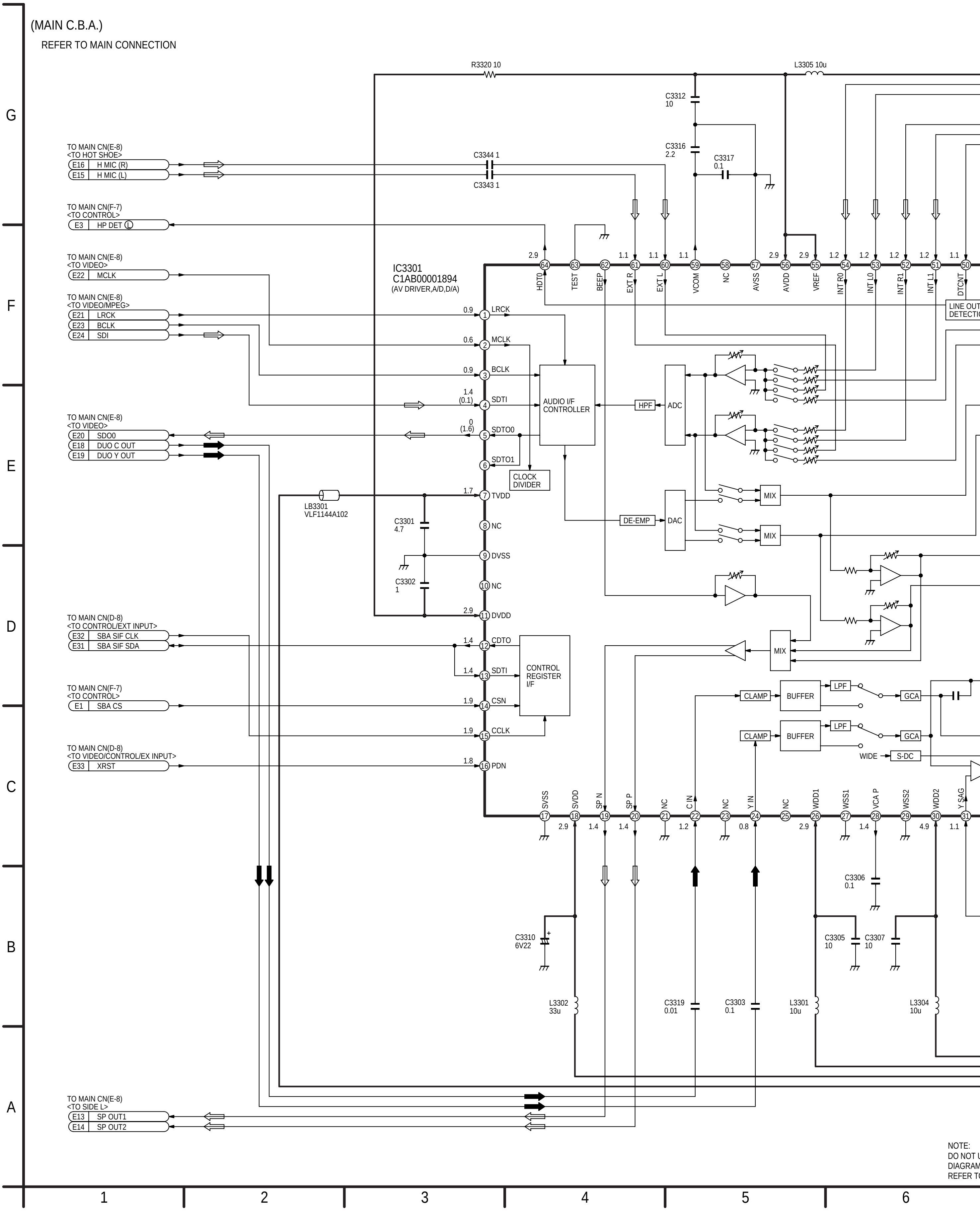
NV-GS200GD,GS120GD MAIN (MAIN CONNECTION) SCHEMATIC DIAGRAM


ZOOM AD
TO SIDE L FP6501
1 RTC 3V
2
3
4 RTC CS
5 RTC SCK
6 RTC DTO
7 RTC INT
8 GND
9 AVREF
10 ZOOM AD
11
12 SP OUT2
13 SP OUT2
14 SP OUT1
15 SP OUT1
16 RESET
17
18 VTR KEY 5
19
20
21
R6911 1200
TO FP6301
TO BATTERY FP1001
1 GND
2 GND
3 GND
4 GND
5 GND
6
7 D
8 D
9
10 +B
11 +B
12 +B
13 +B
14 +B
TO MECHA FP2203
1 T PHOTO
2 V OUT 3V
3 S PHOTO
4 S REEL(-)
5 S REEL(+)
6 VH(+)
7 T REEL(+)
8 T REEL(-)
9 VH(-)
10 SENS LED A
11 SENS LED K
12 C DOWN
13 D GND
14 MIC VDD
15 MIC DT
16 MIC CLK
17 S TAB
18
R6908 33
R6905 33
R6901 33
SENS LED
VCR KEY 1
VCR KEY 2
VCR KEY 3
ACCESS LED
SENS LED
BRIGHT SW
MEGA REQU
POWER SW
SS SW
EJECT SW
TO SIDE R FP6503
1 GND
2 VTR KEY 3
3 VTR KEY 1
4 VTR KEY 2
5 REG D3V
6 LCD OPEN
7 CARD LED
8 CARD DOOR
9 BLC
10 REC REV
VCR KEY 3
VCR KEY 1
VCR KEY 2
ACCESS LED
VZ6501 VRT0158
VZ6502 VRT0158
VZ6503 VRT0158
TO CAPSTAN FP2201
1 M1
2 M1
3 H3(-)
4 VH(+)
5 H3(+)
6 H1(-)
7 H2(-)
8 H1(+)
9 VH(-)
10 H2(+)
11 M3
12 M3
13 M2
14 M2
15 D GND
16 VMR
17 AFG1
18 AFG2
AFG(+)
AFG(-)
TO JACK FP6504
1 EJECT
2 EJECT
3
4
5 D GND
6 D GND
7 TPA(-)
8 TPA(+)
9 TPB(-)
10 TPB(+)
11 D GND
12 D GND
13 S Y I/O
14 S PLUG Ⓛ
15 S C I/O
16 V/HP R
17 R/GND
18 PLUG IN Ⓛ
19 L/HP L
20 CR POWER
21 EX MIC(R)
22 R PLUG Ⓛ
23 EX MIC(L)
24 EXT MIC
25 MIC 5V
26 MIC 5V
27 WD REMO
28 MIC GND
29 MIC GND
30 USB D(+)
31 VBUS
32 USB D(-)
33 D GND
EJECT SW
R GND
L HP L
D(+)
D(-)
TO FP6201
TO REAR OPERATION FP6502
1 DEW
2
3 PHOTO2
4 PHOTO
5 GND
6 CAM KEY 1
7 REG D3V
8 STANDBY LED
9 POWER LED
10 S/S
11 STANDBY SW
12 GND
13
14 POWER ON
SS SW
POWER SW
TO MECHA1 FP2204
1 M LOAD
2 M LOAD
3 M UNLOAD
4 M UNLOAD
5 POS3
6 POS2
7 POS1
8 D GND
32
33
34
35
36
37
38

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

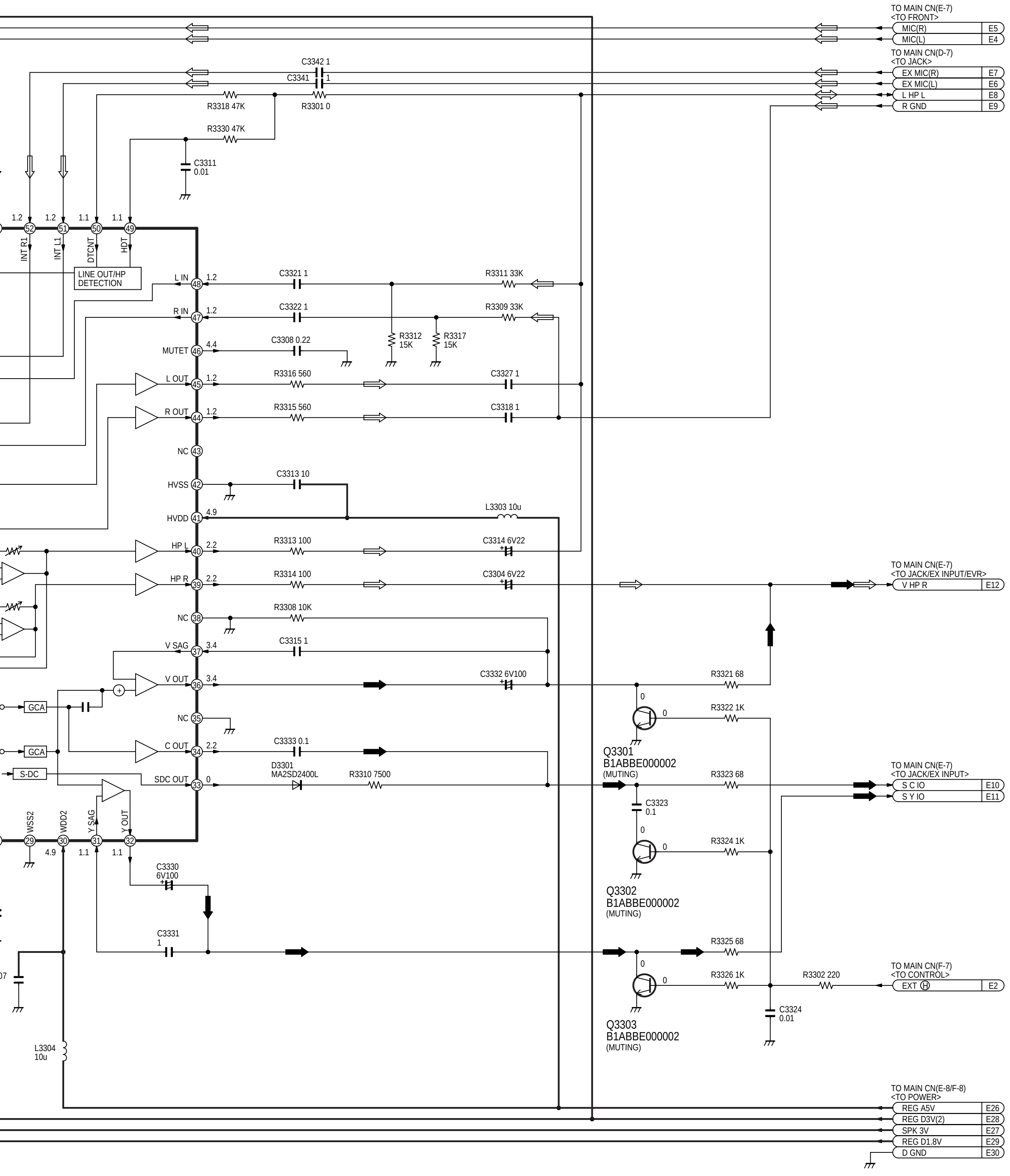
NV-GS200GD,GS120GD
MAIN (MAIN CONNECTION)
SCHEMATIC DIAGRAM

12.22. MAIN (AVIO) SCHEMATIC DIAGRAM


(MAIN C.B.A.)
REFER TO MAIN CONNECTION
G
F
E
D
C
B
A
1
2
3
4
5
6
R3320 10
L3305 10u
C3312 10
C3316 2.2
C3317 0.1
C3344 1
C3343 1
TO MAIN CN(E-8) <TO HOT SHOE>
E16 H MIC (R)
E15 H MIC (L)
TO MAIN CN(F-7) <TO CONTROL>
E3 HP DET L
TO MAIN CN(E-8) <TO VIDEO>
E22 MCLK
TO MAIN CN(E-8) <TO VIDEO/MPEG>
E21 LRCK
E23 BCLK
E24 SDI
TO MAIN CN(E-8) <TO VIDEO>
E20 SDO0
E18 DUO C OUT
E19 DUO Y OUT
TO MAIN CN(D-8) <TO CONTROL/EXT INPUT>
E32 SBA SIF CLK
E31 SBA SIF SDA
TO MAIN CN(F-7) <TO CONTROL>
E1 SBA CS
TO MAIN CN(D-8) <TO VIDEO/CONTROL/EX INPUT>
E33 XRST
TO MAIN CN(E-8) <TO SIDE L>
E13 SP OUT1
E14 SP OUT2
IC3301
C1AB00001894
(AV DRIVER,A/D,D/A)
LB3301 VLF1144A102
C3301 4.7
C3302 1
1 LRCK 0.9
2 MCLK 0.6
3 BCLK 0.9
4 SDTI 1.4 (0.1)
5 SDTO0 0 (1.6)
6 SDTO1
7 TVDD 1.7
8 NC
9 DVSS
10 NC
11 DVDD 2.9
12 CDTO 1.4
13 SDTI 1.4
14 CSN 1.9
15 CCLK 1.9
16 PDN 1.8
17 SVSS
18 SVDD 2.9
19 SP N 1.4
20 SP P 1.4
21 NC
22 C IN 1.2
23 NC
24 Y IN 0.8
25 NC
26 WDD1 2.9
27 WSS1
28 VCA P 1.4
29 WSS2
30 WDD2 4.9
31 Y SAG 1.1
64 HDT0 2.9
63 TEST
62 BEEP
61 EXT R 1.1
60 EXT L 1.1
59 VCOM 1.1
58 NC
57 AVSS
56 AVDD 2.9
55 VREF 2.9
54 INT R0 1.2
53 INT L0 1.2
52 INT R1 1.2
51 INT L1 1.2
50 DTCNT 1.1
AUDIO I/F CONTROLLER
CLOCK DIVIDER
CONTROL REGISTER I/F
HPF
ADC
DE-EMP
DAC
MIX
MIX
MIX
LINE OUT DETECTI
CLAMP
BUFFER
LPF
GCA
CLAMP
BUFFER
LPF
GCA
WIDE
S-DC
C3306 0.1
C3310 6V22
C3305 10
C3307 10
L3302 33u
C3319 0.01
C3303 0.1
L3301 10u
L3304 10u
NOTE:
DO NOT U
DIAGRAM
REFER TO

➡:VIDEO MAIN SIGNAL PATH

⇨:AUDIO MAIN SIGNAL PATH


TO MAIN CN(E-7)
<TO FRONT>
MIC(R) E5
MIC(L) E4
TO MAIN CN(D-7)
<TO JACK>
EX MIC(R) E7
EX MIC(L) E6
L HP L E8
R GND E9
C3342 1
C3341 1
R3318 47K
R3301 0
R3330 47K
C3311
0.01
1.2
1.2
1.1
1.1
52
51
50
49
INT R1
INT L1
DTCNT
HDT
LINE OUT/HP
DETECTION
L IN 48 1.2
C3321 1
R3311 33K
R IN 47 1.2
C3322 1
R3309 33K
MUTET 46 4.4
C3308 0.22
R3312
15K
R3317
15K
L OUT 45 1.2
R3316 560
C3327 1
R OUT 44 1.2
R3315 560
C3318 1
NC 43
HVSS 42
C3313 10
HVDD 41 4.9
L3303 10u
HP L 40 2.2
R3313 100
C3314 6V22
HP R 39 2.2
R3314 100
C3304 6V22
TO MAIN CN(E-7)
<TO JACK/EX INPUT/EVR>
V HP R E12
NC 38
R3308 10K
V SAG 37 3.4
C3315 1
V OUT 36 3.4
C3332 6V100
R3321 68
0
0
R3322 1K
GCA
NC 35
GCA
C OUT 34 2.2
C3333 0.1
Q3301
B1ABBE000002
(MUTING)
S-DC
SDC OUT 33 0
D3301
MA2SD2400L
R3310 7500
R3323 68
TO MAIN CN(E-7)
<TO JACK/EX INPUT>
S C IO E10
S Y IO E11
C3323
0.1
0
0
R3324 1K
WSS2
WDD2
Y SAG
Y OUT
29
30
31
32
4.9
1.1
1.1
C3330
6V100
Q3302
B1ABBE000002
(MUTING)
C3331
1
R3325 68
0
0
R3326 1K
R3302 220
TO MAIN CN(F-7)
<TO CONTROL>
EXT Ⓗ E2
07
C3324
0.01
Q3303
B1ABBE000002
(MUTING)
L3304
10u
TO MAIN CN(E-8/F-8)
<TO POWER>
REG A5V E26
REG D3V(2) E28
SPK 3V E27
REG D1.8V E29
D GND E30

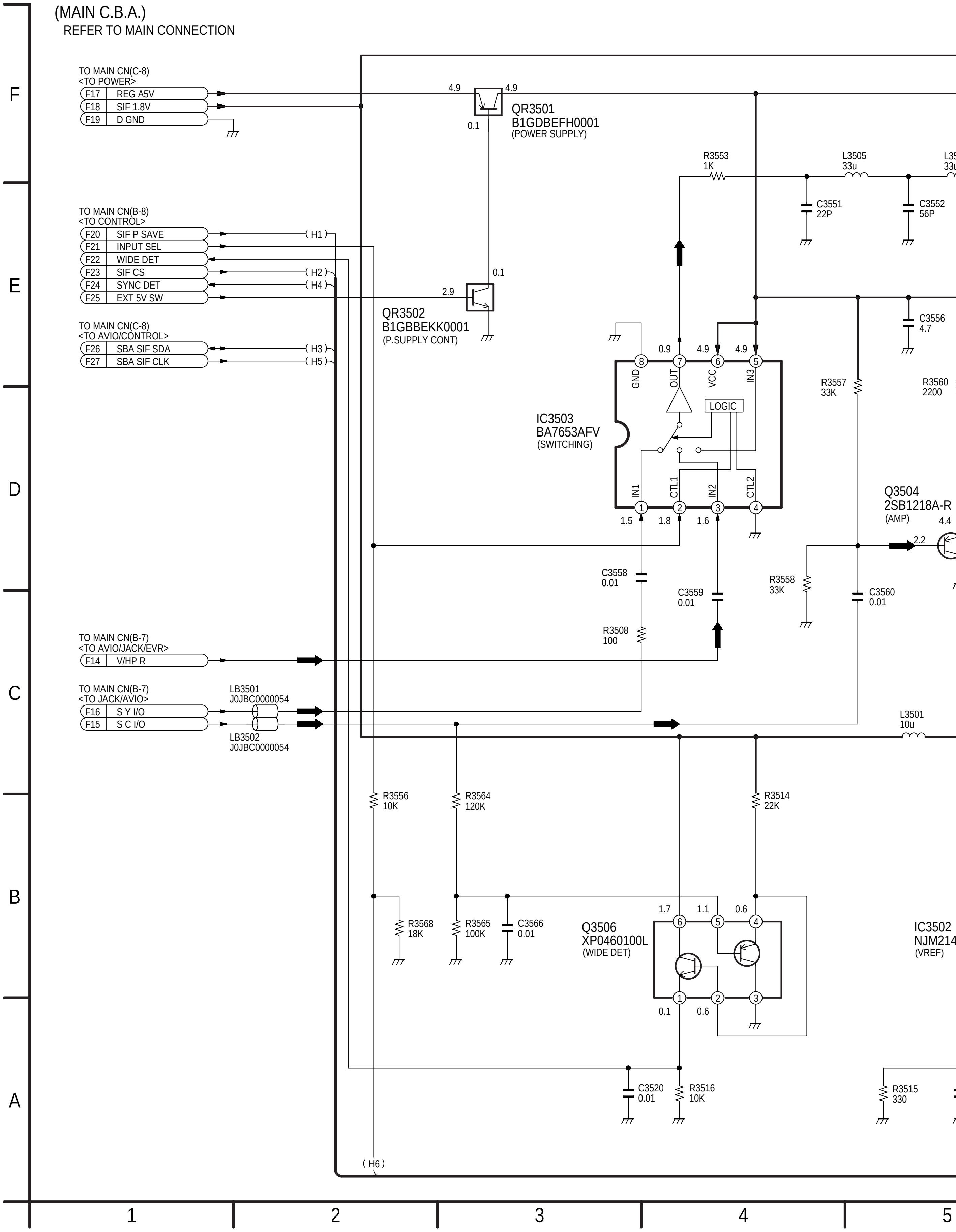
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

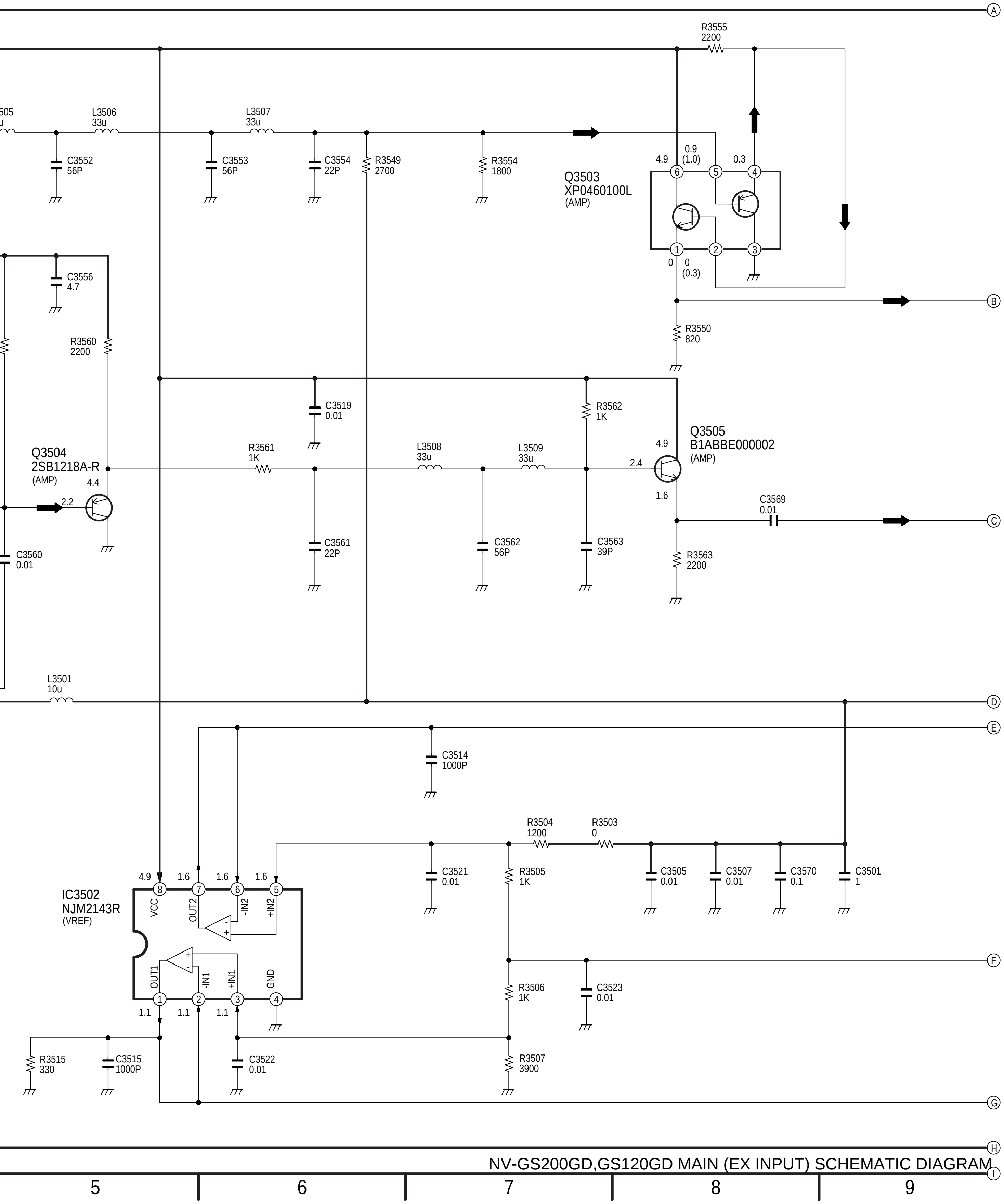
NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE.
(SP MODE)

NV-GS200GD,GS120GD
MAIN (AVIO) SCHEMATIC DIAGRAM

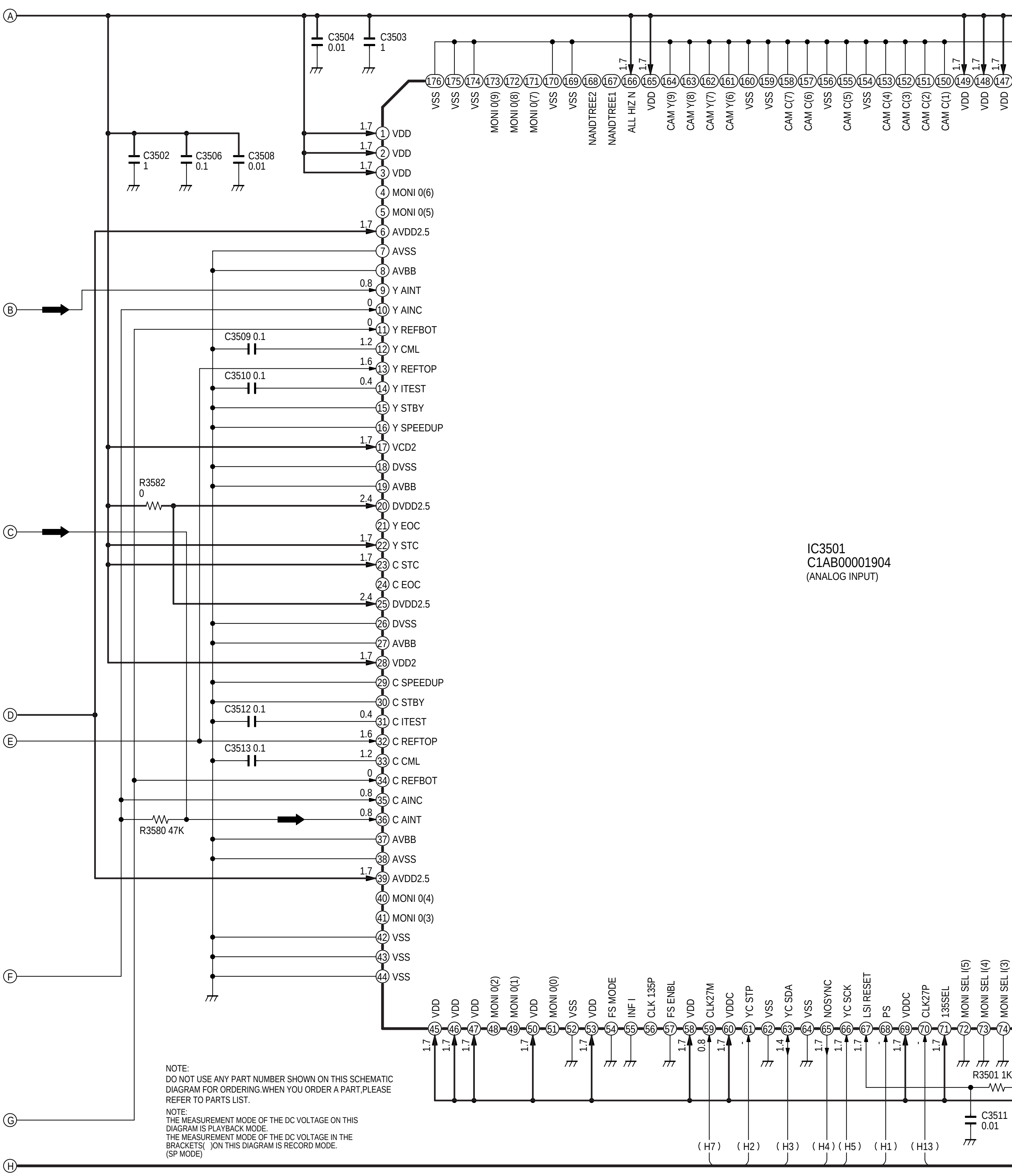
6 7 8 9 10 11

12.23. MAIN (EX INPUT)SCHEMATIC DIAGRAM


(MAIN C.B.A.)
REFER TO MAIN CONNECTION
TO MAIN CN(C-8)
<TO POWER>
F17 REG A5V
F18 SIF 1.8V
F19 D GND
TO MAIN CN(B-8)
<TO CONTROL>
F20 SIF P SAVE
F21 INPUT SEL
F22 WIDE DET
F23 SIF CS
F24 SYNC DET
F25 EXT 5V SW
TO MAIN CN(C-8)
<TO AVIO/CONTROL>
F26 SBA SIF SDA
F27 SBA SIF CLK
TO MAIN CN(B-7)
<TO AVIO/JACK/EVR>
F14 V/HP R
TO MAIN CN(B-7)
<TO JACK/AVIO>
F16 S Y I/O
F15 S C I/O
H1
H2
H4
H3
H5
H6
LB3501
J0JBC0000054
LB3502
J0JBC0000054
4.9
4.9
0.1
QR3501
B1GDBEFH0001
(POWER SUPPLY)
0.1
2.9
QR3502
B1GBBEKK0001
(P.SUPPLY CONT)
R3553
1K
L3505
33u
C3551
22P
C3552
56P
C3556
4.7
IC3503
BA7653AFV
(SWITCHING)
GND
OUT
VCC
IN3
LOGIC
IN1
CTL1
IN2
CTL2
0.9
4.9
4.9
1.5
1.8
1.6
R3557
33K
R3560
2200
Q3504
2SB1218A-R
(AMP)
4.4
2.2
C3558
0.01
C3559
0.01
R3508
100
R3558
33K
C3560
0.01
L3501
10u
R3556
10K
R3564
120K
R3514
22K
R3568
18K
R3565
100K
C3566
0.01
Q3506
XP0460100L
(WIDE DET)
1.7
1.1
0.6
0.1
0.6
IC3502
NJM214
(VREF)
C3520
0.01
R3516
10K
R3515
330
F
E
D
C
B
A
1
2
3
4
5


A
R3555
2200
505
u
L3506
33u
L3507
33u
C3552
56P
C3553
56P
C3554
22P
R3549
2700
R3554
1800
0.9
(1.0)
4.9
0.3
Q3503
XP0460100L
(AMP)
6
5
4
1
2
3
0
0
(0.3)
B
C3556
4.7
R3560
2200
R3550
820
C3519
0.01
R3562
1K
Q3505
B1ABBE000002
(AMP)
4.9
Q3504
2SB1218A-R
(AMP)
4.4
R3561
1K
L3508
33u
L3509
33u
2.4
2.2
1.6
C3569
0.01
C
C3560
0.01
C3561
22P
C3562
56P
C3563
39P
R3563
2200
L3501
10u
D
E
C3514
1000P
R3504
1200
R3503
0
4.9
1.6
1.6
1.6
8
7
6
5
C3521
0.01
R3505
1K
C3505
0.01
C3507
0.01
C3570
0.1
C3501
1
IC3502
NJM2143R
(VREF)
VCC
OUT2
-IN2
+IN2
OUT1
-IN1
+IN1
GND
1
2
3
4
1.1
1.1
1.1
F
R3506
1K
C3523
0.01
R3515
330
C3515
1000P
C3522
0.01
R3507
3900
G
H
I
5
6
7
8
9

NV-GS200GD,GS120GD MAIN (EX INPUT) SCHEMATIC DIAGRAM

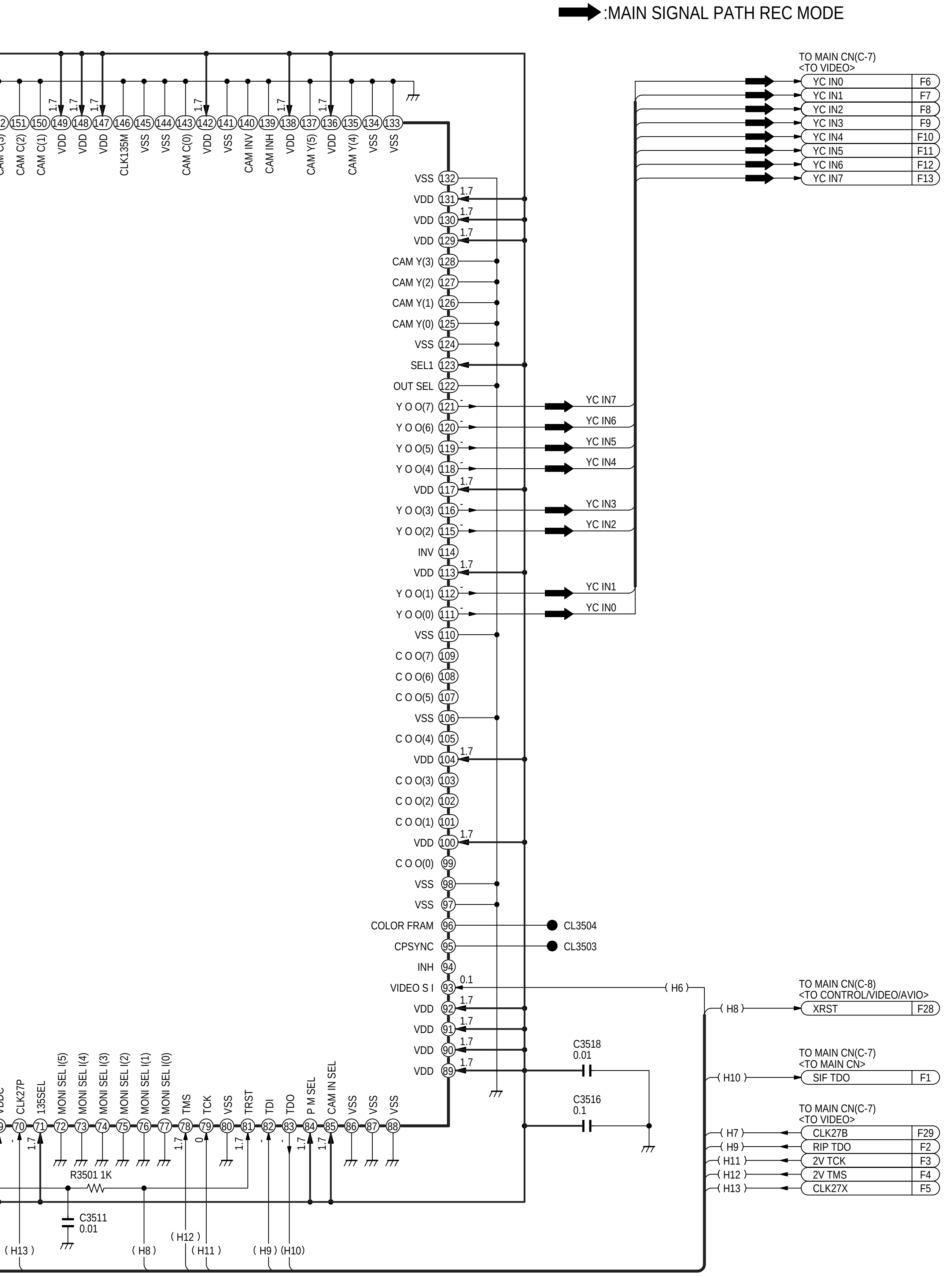

A
B
C
D
E
F
G
H
I
C3504 0.01
C3503 1
C3502 1
C3506 0.1
C3508 0.01
C3509 0.1
C3510 0.1
C3512 0.1
C3513 0.1
R3582 0
R3580 47K
R3501 1K
C3511 0.01
IC3501
C1AB00001904
(ANALOG INPUT)
1 VDD 1.7
2 VDD 1.7
3 VDD 1.7
4 MONI 0(6)
5 MONI 0(5)
6 AVDD2.5 1.7
7 AVSS
8 AVBB
9 Y AINT 0.8
10 Y AINC 0
11 Y REFBOT 0
12 Y CML 1.2
13 Y REFTOP 1.6
14 Y ITEST 0.4
15 Y STBY
16 Y SPEEDUP
17 VCD2 1.7
18 DVSS
19 AVBB
20 DVDD2.5 2.4
21 Y EOC
22 Y STC 1.7
23 C STC 1.7
24 C EOC
25 DVDD2.5 2.4
26 DVSS
27 AVBB
28 VDD2 1.7
29 C SPEEDUP
30 C STBY
31 C ITEST 0.4
32 C REFTOP 1.6
33 C CML 1.2
34 C REFBOT 0
35 C AINC 0.8
36 C AINT 0.8
37 AVBB
38 AVSS
39 AVDD2.5 1.7
40 MONI 0(4)
41 MONI 0(3)
42 VSS
43 VSS
44 VSS
45 VDD 1.7
46 VDD 1.7
47 VDD 1.7
48 MONI 0(2)
49 MONI 0(1)
50 VDD 1.7
51 MONI 0(0)
52 VSS
53 VDD 1.7
54 FS MODE
55 INF I
56 CLK 135P
57 FS ENBL
58 VDD 1.7
59 CLK27M 0.8
60 VDDC 1.7
61 YC STP -
62 VSS
63 YC SDA 1.4
64 VSS
65 NOSYNC 1.7
66 YC SCK 1.7
67 LSI RESET 1.7
68 PS -
69 VDDC 1.7
70 CLK27P -
71 135SEL 1.7
72 MONI SEL I(5)
73 MONI SEL I(4)
74 MONI SEL I(3)
147 VDD 1.7
148 VDD 1.7
149 VDD 1.7
150 CAM C(1)
151 CAM C(2)
152 CAM C(3)
153 CAM C(4)
154 VSS
155 CAM C(5)
156 VSS
157 CAM C(6)
158 CAM C(7)
159 VSS
160 VSS
161 CAM Y(6)
162 CAM Y(7)
163 CAM Y(8)
164 CAM Y(9)
165 VDD 1.7
166 ALL HIZ N 1.7
167 NANDTREE1
168 NANDTREE2
169 VSS
170 VSS
171 MONI 0(7)
172 MONI 0(8)
173 MONI 0(9)
174 VSS
175 VSS
176 VSS
(H7)
(H2)
(H3)
(H4)
(H5)
(H1)
(H13)

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE.
(SP MODE)

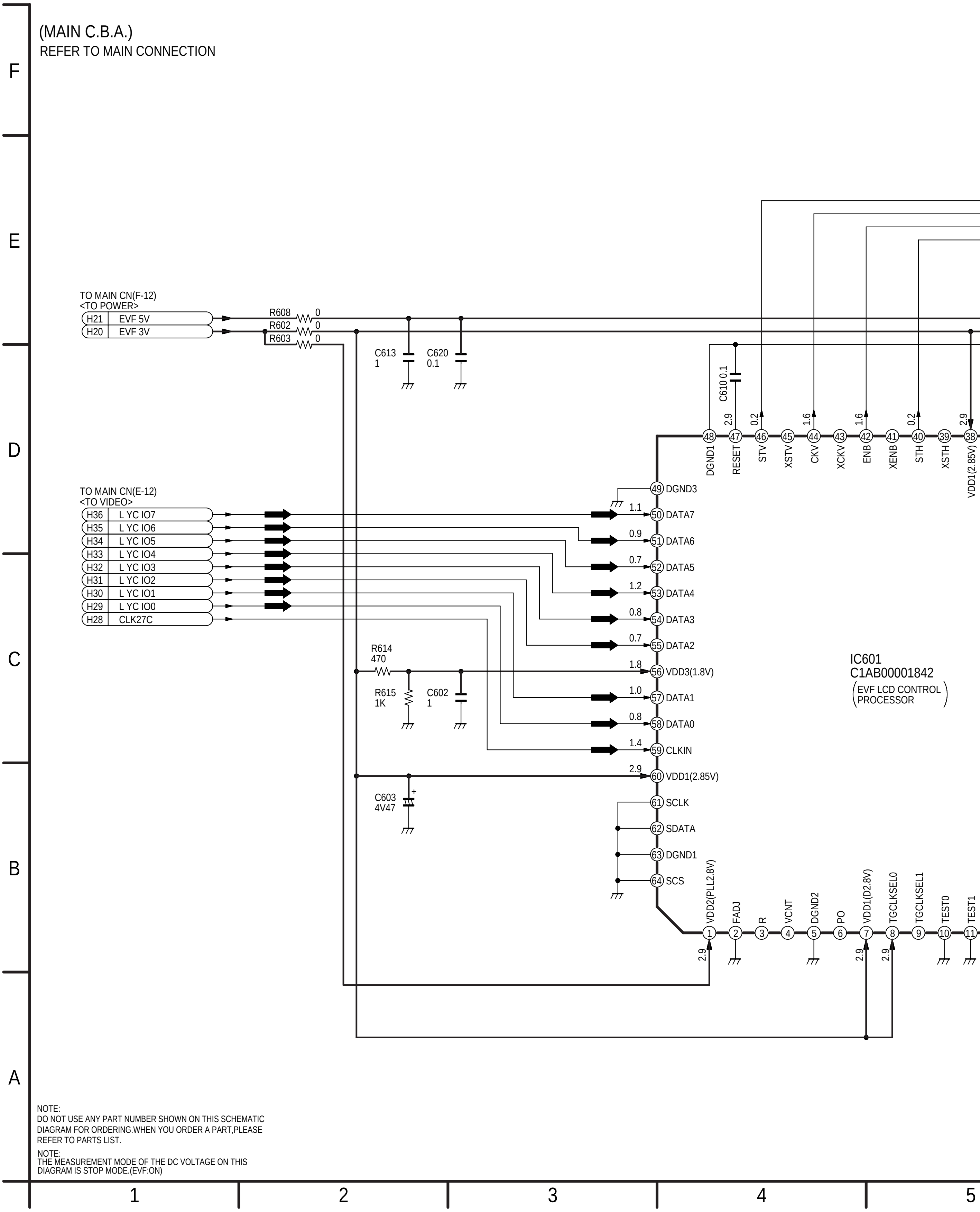
NV-GS200GD,GS120GD MAIN (EX INPUT) SCHEMATIC DIAGRAM

10 11 12 13


:MAIN SIGNAL PATH REC MODE
TO MAIN CN(C-7)
<TO VIDEO>
YC IN0 F6
YC IN1 F7
YC IN2 F8
YC IN3 F9
YC IN4 F10
YC IN5 F11
YC IN6 F12
YC IN7 F13
CAM C(2)
CAM C(1)
VDD
VDD
VDD
CLK135M
VSS
VSS
CAM C(0)
VDD
VSS
CAM INV
CAM INH
VDD
CAM Y(5)
VDD
CAM Y(4)
VSS
VSS
VSS 132
VDD 131
VDD 130
VDD 129
CAM Y(3) 128
CAM Y(2) 127
CAM Y(1) 126
CAM Y(0) 125
VSS 124
SEL1 123
OUT SEL 122
Y O O(7) 121
Y O O(6) 120
Y O O(5) 119
Y O O(4) 118
VDD 117
Y O O(3) 116
Y O O(2) 115
INV 114
VDD 113
Y O O(1) 112
Y O O(0) 111
VSS 110
C O O(7) 109
C O O(6) 108
C O O(5) 107
VSS 106
C O O(4) 105
VDD 104
C O O(3) 103
C O O(2) 102
C O O(1) 101
VDD 100
C O O(0) 99
VSS 98
VSS 97
COLOR FRAM 96
CPSYNC 95
INH 94
VIDEO S I 93
VDD 92
VDD 91
VDD 90
VDD 89
1.7
0.1
YC IN7
YC IN6
YC IN5
YC IN4
YC IN3
YC IN2
YC IN1
YC IN0
CL3504
CL3503
H6
TO MAIN CN(C-8)
<TO CONTROL/VIDEO/AVIO>
H8
XRST F28
C3518
0.01
TO MAIN CN(C-7)
<TO MAIN CN>
H10
SIF TDO F1
C3516
0.1
TO MAIN CN(C-7)
<TO VIDEO>
H7 CLK27B F29
H9 RIP TDO F2
H11 2V TCK F3
H12 2V TMS F4
H13 CLK27X F5
CLK27P
135SEL
MONI SEL I(5)
MONI SEL I(4)
MONI SEL I(3)
MONI SEL I(2)
MONI SEL I(1)
MONI SEL I(0)
TMS
TCK
VSS
TRST
TDI
TDO
P M SEL
CAM IN SEL
VSS
VSS
VSS
R3501 1K
C3511
0.01
H13
H8
H12
H11
H9
H10
14
15
16
17

NV-GS200GD,GS120GD MAIN (EX INPUT) SCHEMATIC DIAGRAM

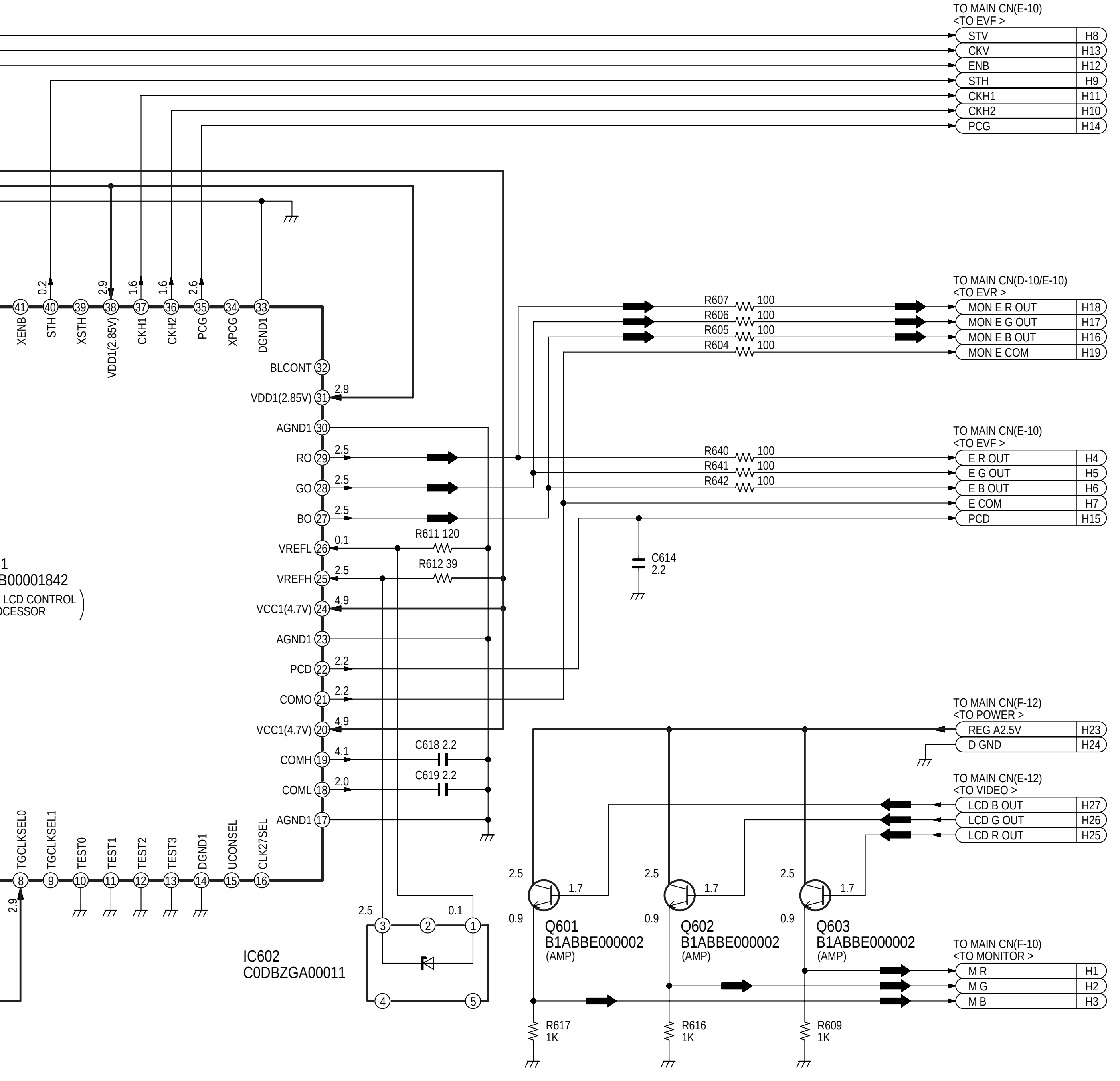
12.24. MAIN (LCD) SCHEMATIC DIAGRAM


(MAIN C.B.A.)
REFER TO MAIN CONNECTION
F
E
D
C
B
A
1
2
3
4
5
TO MAIN CN(F-12)
<TO POWER>
H21 EVF 5V
H20 EVF 3V
R608 0
R602 0
R603 0
C613 1
C620 0.1
C610 0.1
TO MAIN CN(E-12)
<TO VIDEO>
H36 L YC IO7
H35 L YC IO6
H34 L YC IO5
H33 L YC IO4
H32 L YC IO3
H31 L YC IO2
H30 L YC IO1
H29 L YC IO0
H28 CLK27C
R614 470
R615 1K
C602 1
C603 4V47
2.9
0.2
1.6
1.6
0.2
2.9
48 DGND1
47 RESET
46 STV
45 XSTV
44 CKV
43 XCKV
42 ENB
41 XENB
40 STH
39 XSTH
38 VDD1(2.85V)
49 DGND3
1.1 50 DATA7
0.9 51 DATA6
0.7 52 DATA5
1.2 53 DATA4
0.8 54 DATA3
0.7 55 DATA2
1.8 56 VDD3(1.8V)
1.0 57 DATA1
0.8 58 DATA0
1.4 59 CLKIN
2.9 60 VDD1(2.85V)
61 SCLK
62 SDATA
63 DGND1
64 SCS
IC601
C1AB00001842
(EVF LCD CONTROL PROCESSOR)
1 VDD2(PLL2.8V)
2 FADJ
3 R
4 VCNT
5 DGND2
6 PO
7 VDD1(D2.8V)
8 TGCLKSEL0
9 TGCLKSEL1
10 TEST0
11 TEST1
2.9
2.9
2.9

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.(EVF:ON)

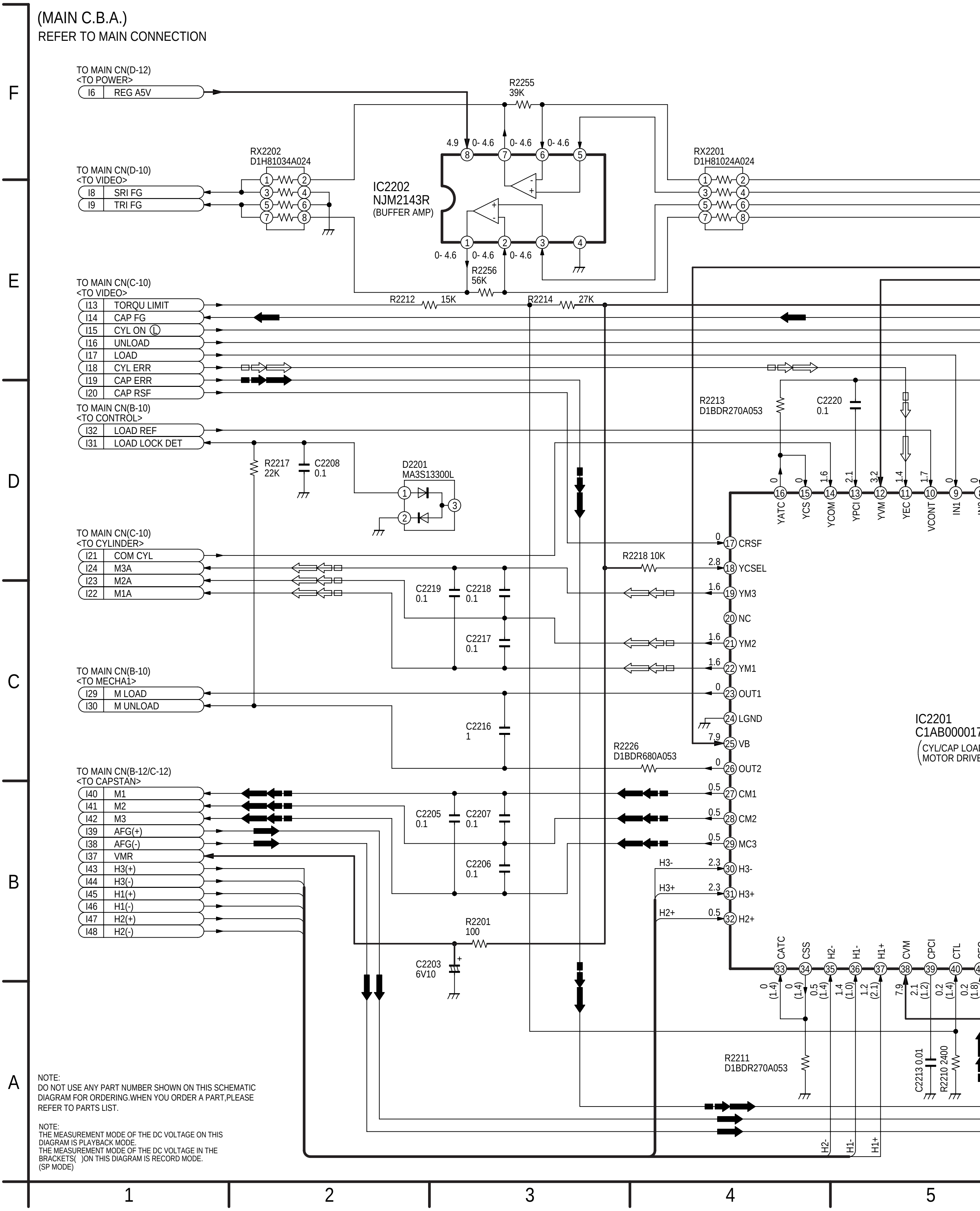
➡:VIDEO MAIN SIGNAL PATH


TO MAIN CN(E-10)
<TO EVF >
STV H8
CKV H13
ENB H12
STH H9
CKH1 H11
CKH2 H10
PCG H14
0.2
2.9
1.6
1.6
2.6
41 XENB
40 STH
39 XSTH
38 VDD1(2.85V)
37 CKH1
36 CKH2
35 PCG
34 XPCG
33 DGND1
BLCONT 32
VDD1(2.85V) 31 2.9
AGND1 30
RO 29 2.5
GO 28 2.5
BO 27 2.5
VREFL 26 0.1
VREFH 25 2.5
VCC1(4.7V) 24 4.9
AGND1 23
PCD 22 2.2
COMO 21 2.2
VCC1(4.7V) 20 4.9
COMH 19 4.1
COML 18 2.0
AGND1 17
8 TGCLKSEL0
9 TGCLKSEL1
10 TEST0
11 TEST1
12 TEST2
13 TEST3
14 DGND1
15 UCONSEL
16 CLK27SEL
2.9
1
B00001842
LCD CONTROL
OCESSOR
R611 120
R612 39
C618 2.2
C619 2.2
IC602
C0DBZGA00011
2.5
0.1
3 2 1
4 5
TO MAIN CN(D-10/E-10)
<TO EVR >
R607 100
R606 100
R605 100
R604 100
MON E R OUT H18
MON E G OUT H17
MON E B OUT H16
MON E COM H19
TO MAIN CN(E-10)
<TO EVF >
R640 100
R641 100
R642 100
E R OUT H4
E G OUT H5
E B OUT H6
E COM H7
PCD H15
C614
2.2
TO MAIN CN(F-12)
<TO POWER >
REG A2.5V H23
D GND H24
TO MAIN CN(E-12)
<TO VIDEO >
LCD B OUT H27
LCD G OUT H26
LCD R OUT H25
2.5
1.7
0.9
Q601
B1ABBE000002
(AMP)
2.5
1.7
0.9
Q602
B1ABBE000002
(AMP)
2.5
1.7
0.9
Q603
B1ABBE000002
(AMP)
TO MAIN CN(F-10)
<TO MONITOR >
M R H1
M G H2
M B H3
R617
1K
R616
1K
R609
1K

NV-GS200GD,GS120GD
MAIN (LCD) SCHEMATIC DIAGRAM

5 6 7 8 9

12.25. MAIN (DRIVE) SCHEMATIC DIAGRAM


(MAIN C.B.A.)
REFER TO MAIN CONNECTION
F
E
D
C
B
A
1
2
3
4
5
TO MAIN CN(D-12)
<TO POWER>
I6 REG A5V
TO MAIN CN(D-10)
<TO VIDEO>
I8 SRI FG
I9 TRI FG
RX2202
D1H81034A024
R2255
39K
4.9
0- 4.6
IC2202
NJM2143R
(BUFFER AMP)
R2256
56K
RX2201
D1H81024A024
TO MAIN CN(C-10)
<TO VIDEO>
I13 TORQU LIMIT
I14 CAP FG
I15 CYL ON Ⓛ
I16 UNLOAD
I17 LOAD
I18 CYL ERR
I19 CAP ERR
I20 CAP RSF
R2212 15K
R2214 27K
TO MAIN CN(B-10)
<TO CONTROL>
I32 LOAD REF
I31 LOAD LOCK DET
R2217
22K
C2208
0.1
D2201
MA3S13300L
R2213
D1BDR270A053
C2220
0.1
TO MAIN CN(C-10)
<TO CYLINDER>
I21 COM CYL
I24 M3A
I23 M2A
I22 M1A
C2219
0.1
C2218
0.1
C2217
0.1
R2218 10K
TO MAIN CN(B-10)
<TO MECHA1>
I29 M LOAD
I30 M UNLOAD
C2216
1
R2226
D1BDR680A053
TO MAIN CN(B-12/C-12)
<TO CAPSTAN>
I40 M1
I41 M2
I42 M3
I39 AFG(+)
I38 AFG(-)
I37 VMR
I43 H3(+)
I44 H3(-)
I45 H1(+)
I46 H1(-)
I47 H2(+)
I48 H2(-)
C2205
0.1
C2207
0.1
C2206
0.1
R2201
100
C2203
6V10
R2211
D1BDR270A053
C2213 0.01
R2210 2400
IC2201
C1AB000017
(CYL/CAP LOAD
MOTOR DRIVE
16 YATC
15 YCS
14 YCOM
13 YPCI
12 YVM
11 YEC
10 VCONT
9 IN1
17 CRSF
18 YCSEL
19 YM3
20 NC
21 YM2
22 YM1
23 OUT1
24 LGND
25 VB
26 OUT2
27 CM1
28 CM2
29 MC3
30 H3-
31 H3+
32 H2+
33 CATC
34 CSS
35 H2-
36 H1-
37 H1+
38 CVM
39 CPCI
40 CTL
0
2.8
1.6
1.6
1.6
0
7.9
0
0.5
0.5
0.5
2.3
2.3
0.5
0 0 1.6 2.1 3.2 1.4 1.7 0 0
0 (1.4)
0 (1.4)
0.5 (1.4)
1.4 (1.0)
1.2 (2.1)
7.9
2.1 (1.2)
0.2 (1.4)
0.2 (1.8)
H3-
H3+
H2+
H2-
H1-
H1+

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

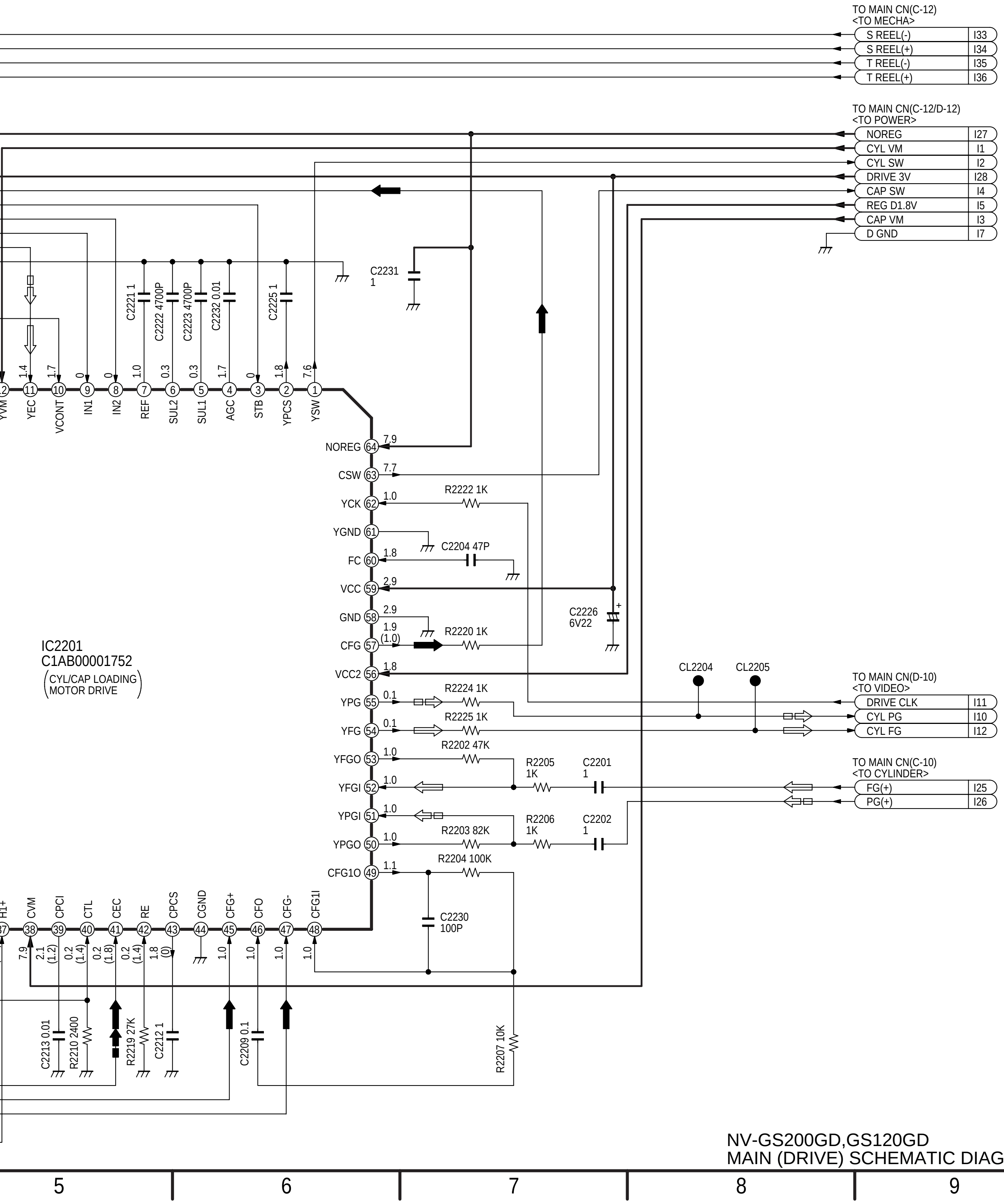
NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE.
(SP MODE)

⇨ :CYLINDER SERVO SPEED LOOP

➡ :CAPSTAN SERVO SPEED LOOP

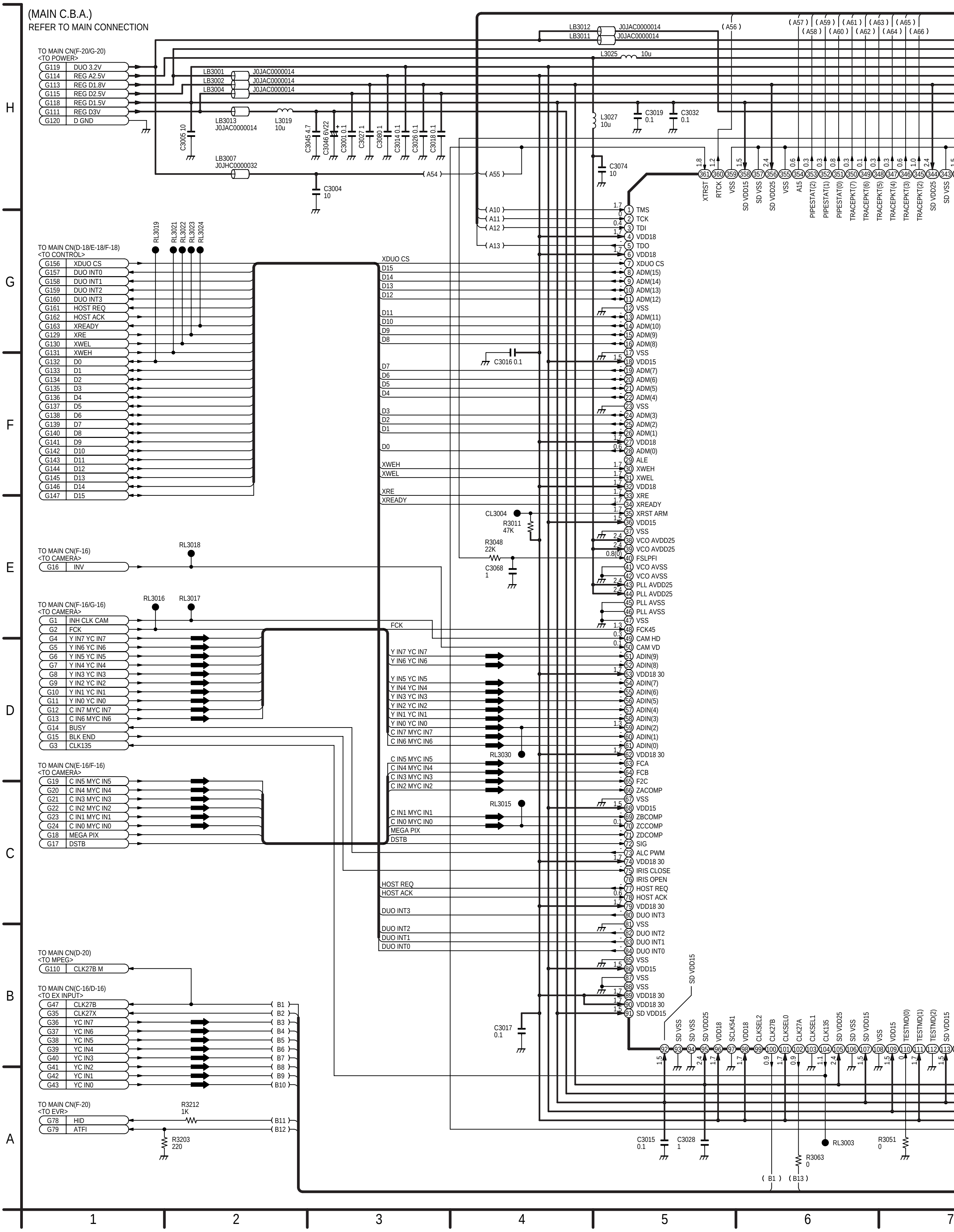
▭⇨ :CYLINDER SERVO PHASE LOOP

■➡ :CAPSTAN SERVO PHASE LOOP

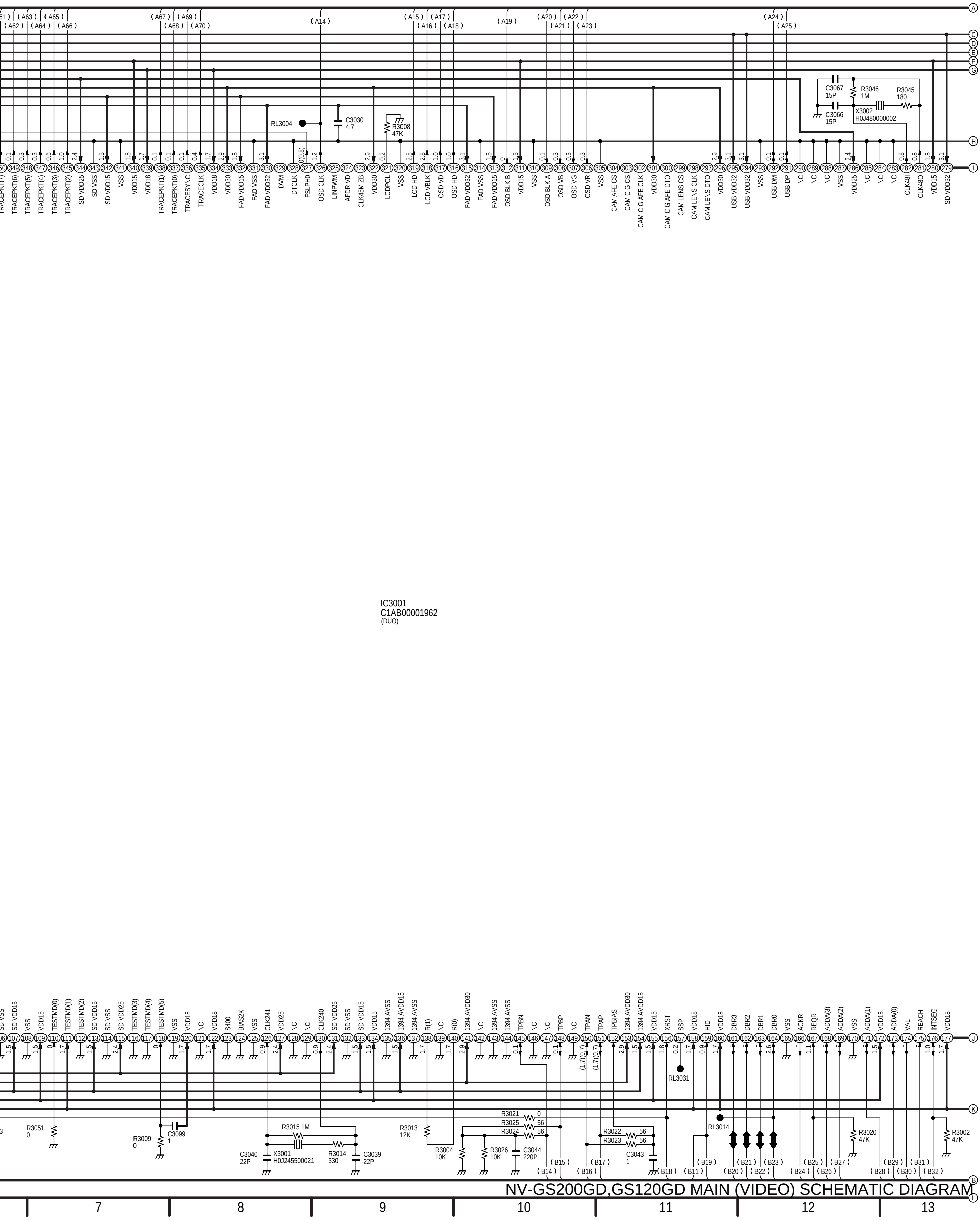

TO MAIN CN(C-12)
<TO MECHA>
S REEL(-) I33
S REEL(+) I34
T REEL(-) I35
T REEL(+) I36
TO MAIN CN(C-12/D-12)
<TO POWER>
NOREG I27
CYL VM I1
CYL SW I2
DRIVE 3V I28
CAP SW I4
REG D1.8V I5
CAP VM I3
D GND I7
C2231 1
C2221 1
C2222 4700P
C2223 4700P
C2232 0.01
C2225 1
YVM YEC VCONT IN1 IN2 REF SUL2 SUL1 AGC STB YPCS YSW
NOREG 64 7.9
CSW 63 7.7
YCK 62 1.0
R2222 1K
YGND 61
C2204 47P
FC 60 1.8
VCC 59 2.9
GND 58 2.9
C2226 6V22
CFG 57 1.9 (1.0)
R2220 1K
VCC2 56 1.8
IC2201
C1AB00001752
(CYL/CAP LOADING MOTOR DRIVE)
CL2204
CL2205
YPG 55 0.1
R2224 1K
YFG 54 0.1
R2225 1K
TO MAIN CN(D-10)
<TO VIDEO>
DRIVE CLK I11
CYL PG I10
CYL FG I12
YFGO 53 1.0
R2202 47K
R2205 1K
C2201 1
YFGI 52 1.0
TO MAIN CN(C-10)
<TO CYLINDER>
FG(+) I25
PG(+) I26
YPGI 51 1.0
R2203 82K
R2206 1K
C2202 1
YPGO 50 1.0
CFG1O 49 1.1
R2204 100K
C2230 100P
CVM CPCI CTL CEC RE CPCS CGND CFG+ CFO CFG- CFG1I
C2213 0.01
R2210 2400
R2219 27K
C2212 1
C2209 0.1
R2207 10K
5
6
7
8
9

NV-GS200GD,GS120GD
MAIN (DRIVE) SCHEMATIC DIAGRAM

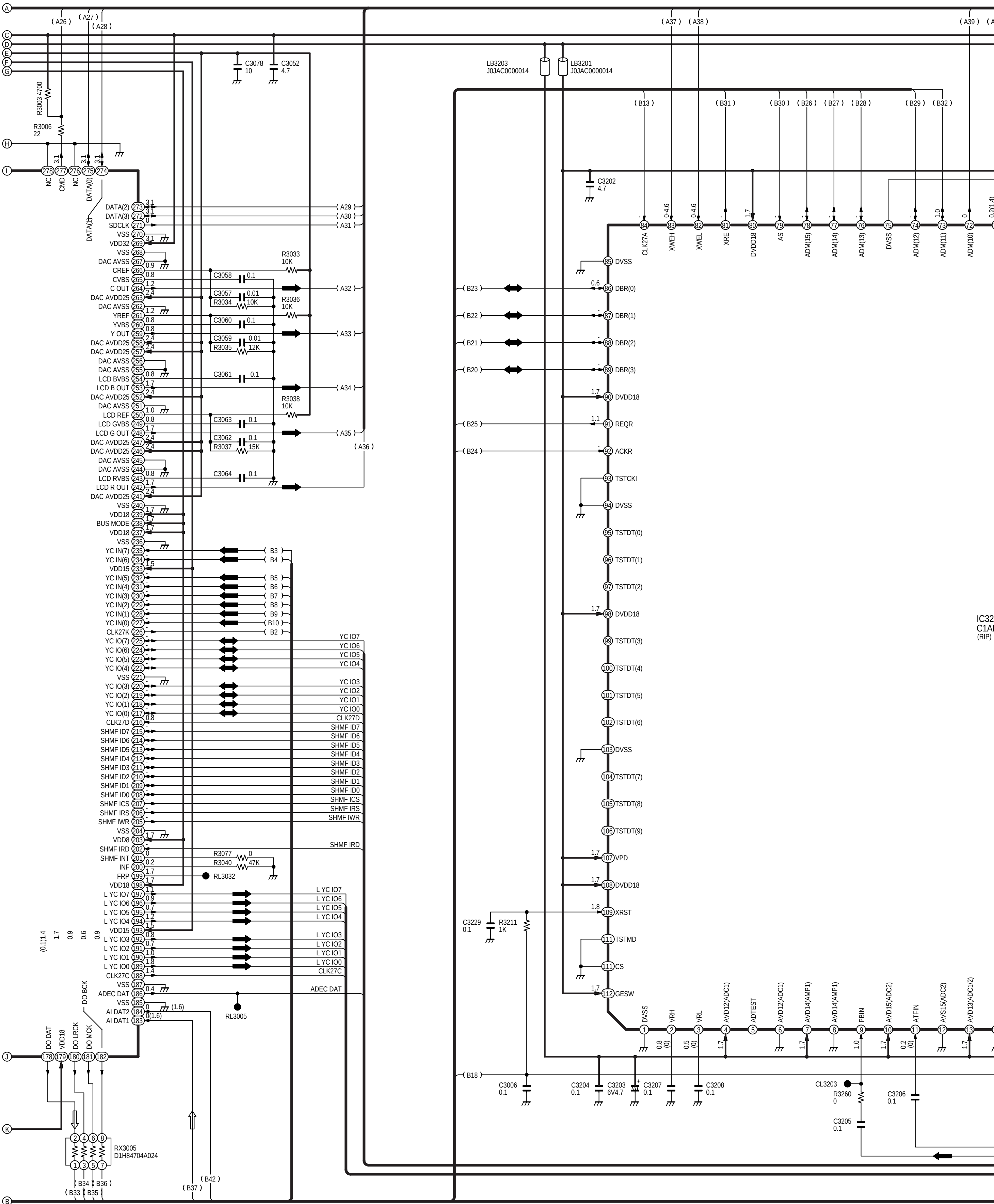
12.26. MAIN (VIDEO) SCHEMATIC DIAGRAM



(MAIN C.B.A.)
REFER TO MAIN CONNECTION
TO MAIN CN(F-20/G-20)
<TO POWER>
G119 DUO 3.2V
G114 REG A2.5V
G113 REG D1.8V
G115 REG D2.5V
G118 REG D1.5V
G111 REG D3V
G120 D GND
LB3001 J0JAC0000014
LB3002 J0JAC0000014
LB3004 J0JAC0000014
LB3013 J0JAC0000014
L3019 10u
LB3007 J0JHC0000032
LB3012 J0JAC0000014
LB3011 J0JAC0000014
L3025 10u
L3027 10u
C3005 10
C3045 4.7
C3046 6V22
C3001 0.1
C3027 1
C3080 1
C3014 0.1
C3026 0.1
C3018 0.1
C3019 0.1
C3032 0.1
C3074 10
C3004 10
A54
A55
A56
A57
A58
A59
A60
A61
A62
A63
A64
A65
A66
A10
A11
A12
A13
RL3019
RL3021
RL3022
RL3023
RL3024
TO MAIN CN(D-18/E-18/F-18)
<TO CONTROL>
G156 XDUO CS
G157 DUO INT0
G158 DUO INT1
G159 DUO INT2
G160 DUO INT3
G161 HOST REQ
G162 HOST ACK
G163 XREADY
G129 XRE
G130 XWEL
G131 XWEH
G132 D0
G133 D1
G134 D2
G135 D3
G136 D4
G137 D5
G138 D6
G139 D7
G140 D8
G141 D9
G142 D10
G143 D11
G144 D12
G145 D13
G146 D14
G147 D15
TO MAIN CN(F-16)
<TO CAMERA>
G16 INV
RL3018
TO MAIN CN(F-16/G-16)
<TO CAMERA>
RL3016
RL3017
G1 INH CLK CAM
G2 FCK
G4 Y IN7 YC IN7
G5 Y IN6 YC IN6
G6 Y IN5 YC IN5
G7 Y IN4 YC IN4
G8 Y IN3 YC IN3
G9 Y IN2 YC IN2
G10 Y IN1 YC IN1
G11 Y IN0 YC IN0
G12 C IN7 MYC IN7
G13 C IN6 MYC IN6
G14 BUSY
G15 BLK END
G3 CLK135
TO MAIN CN(E-16/F-16)
<TO CAMERA>
G19 C IN5 MYC IN5
G20 C IN4 MYC IN4
G21 C IN3 MYC IN3
G22 C IN2 MYC IN2
G23 C IN1 MYC IN1
G24 C IN0 MYC IN0
G18 MEGA PIX
G17 DSTB
TO MAIN CN(D-20)
<TO MPEG>
G110 CLK27B M
TO MAIN CN(C-16/D-16)
<TO EX INPUT>
G47 CLK27B
G35 CLK27X
G36 YC IN7
G37 YC IN6
G38 YC IN5
G39 YC IN4
G40 YC IN3
G41 YC IN2
G42 YC IN1
G43 YC IN0
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
TO MAIN CN(F-20)
<TO EVR>
G78 HID
G79 ATFI
R3212 1K
R3203 220
B11
B12
XDUO CS
XWEH
XWEL
XRE
XREADY
FCK
HOST REQ
HOST ACK
DUO INT3
DUO INT2
DUO INT1
DUO INT0
C3016 0.1
CL3004
R3011 47K
R3048 22K
C3068 1
RL3030
RL3015
C3017 0.1
C3015 0.1
C3028 1
RL3003
R3051 0
R3063 0
B1
B13
1 TMS
2 TCK
3 TDI
4 VDD18
5 TDO
6 VDD18
7 XDUO CS
8 ADM(15)
9 ADM(14)
10 ADM(13)
11 ADM(12)
12 VSS
13 ADM(11)
14 ADM(10)
15 ADM(9)
16 ADM(8)
17 VSS
18 VDD15
19 ADM(7)
20 ADM(6)
21 ADM(5)
22 ADM(4)
23 VSS
24 ADM(3)
25 ADM(2)
26 ADM(1)
27 VDD18
28 ADM(0)
29 ALE
30 XWEH
31 XWEL
32 VDD18
33 XRE
34 XREADY
35 XRST ARM
36 VDD15
37 VSS
38 VCO AVDD25
39 VCO AVDD25
40 FSLPFI
41 VCO AVSS
42 VCO AVSS
43 PLL AVDD25
44 PLL AVDD25
45 PLL AVSS
46 PLL AVSS
47 VSS
48 FCK45
49 CAM HD
50 CAM VD
51 ADIN(9)
52 ADIN(8)
53 VDD18 30
54 ADIN(7)
55 ADIN(6)
56 ADIN(5)
57 ADIN(4)
58 ADIN(3)
59 ADIN(2)
60 ADIN(1)
61 ADIN(0)
62 VDD18 30
63 FCA
64 FCB
65 F2C
66 ZACOMP
67 VSS
68 VDD15
69 ZBCOMP
70 ZCCOMP
71 ZDCOMP
72 SIG
73 ALC PWM
74 VDD18 30
75 IRIS CLOSE
76 IRIS OPEN
77 HOST REQ
78 HOST ACK
79 VDD18 30
80 DUO INT3
81 VSS
82 DUO INT2
83 DUO INT1
84 DUO INT0
85 VSS
86 VDD15
87 VSS
88 VSS
89 VDD18 30
90 VDD18 30
91 SD VDD15
92 SD VSS
93 SD VSS
94 SD VDD25
95 VDD18
96 SCLK541
97 VDD18
98 CLKSEL2
99 CLK27B
100 CLKSEL0
101 CLK27A
102 CLKSEL1
103 CLK135
104 SD VDD25
105 SD VSS
106 SD VDD15
107 VSS
108 VDD15
109 TESTMD(0)
110 TESTMD(1)
111 TESTMD(2)
112 SD VDD15
361 XTRST
360 RTCK
359 VSS
358 SD VDD15
357 SD VSS
356 SD VDD25
355 VSS
354 A15
353 PIPESTAT(2)
352 PIPESTAT(1)
351 PIPESTAT(0)
350 TRACEPKT(7)
349 TRACEPKT(6)
348 TRACEPKT(5)
347 TRACEPKT(4)
346 TRACEPKT(3)
345 TRACEPKT(2)
344 SD VDD25
343 SD VSS
SD VDD15
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7

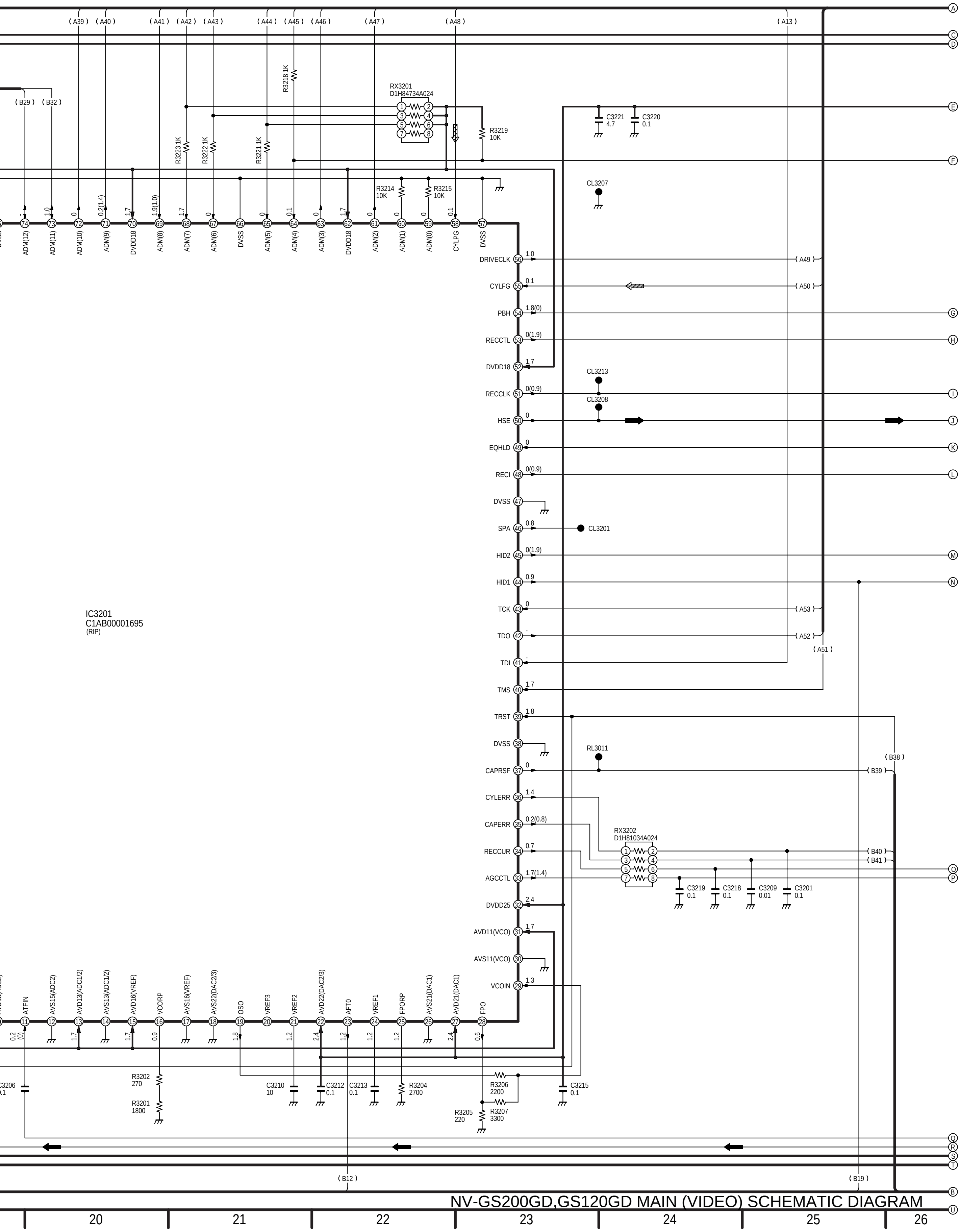

IC3001
C1AB00001962
(DUO)
RL3004
C3030
4.7
R3008
47K
C3067
15P
R3046
1M
R3045
180
C3066
15P
X3002
H0J480000002
R3051
0
R3009
0
C3099
1
R3015 1M
C3040
22P
X3001
H0J245500021
R3014
330
C3039
22P
R3013
12K
R3004
10K
R3021
0
R3025
56
R3024
56
R3026
10K
C3044
220P
R3022
56
R3023
56
C3043
1
RL3031
RL3014
R3020
47K
R3002
47K
A
C
D
E
F
G
H
I
J
K
B
L
7
8
9
10
11
12
13

NV-GS200GD,GS120GD MAIN (VIDEO) SCHEMATIC DIAGRAM

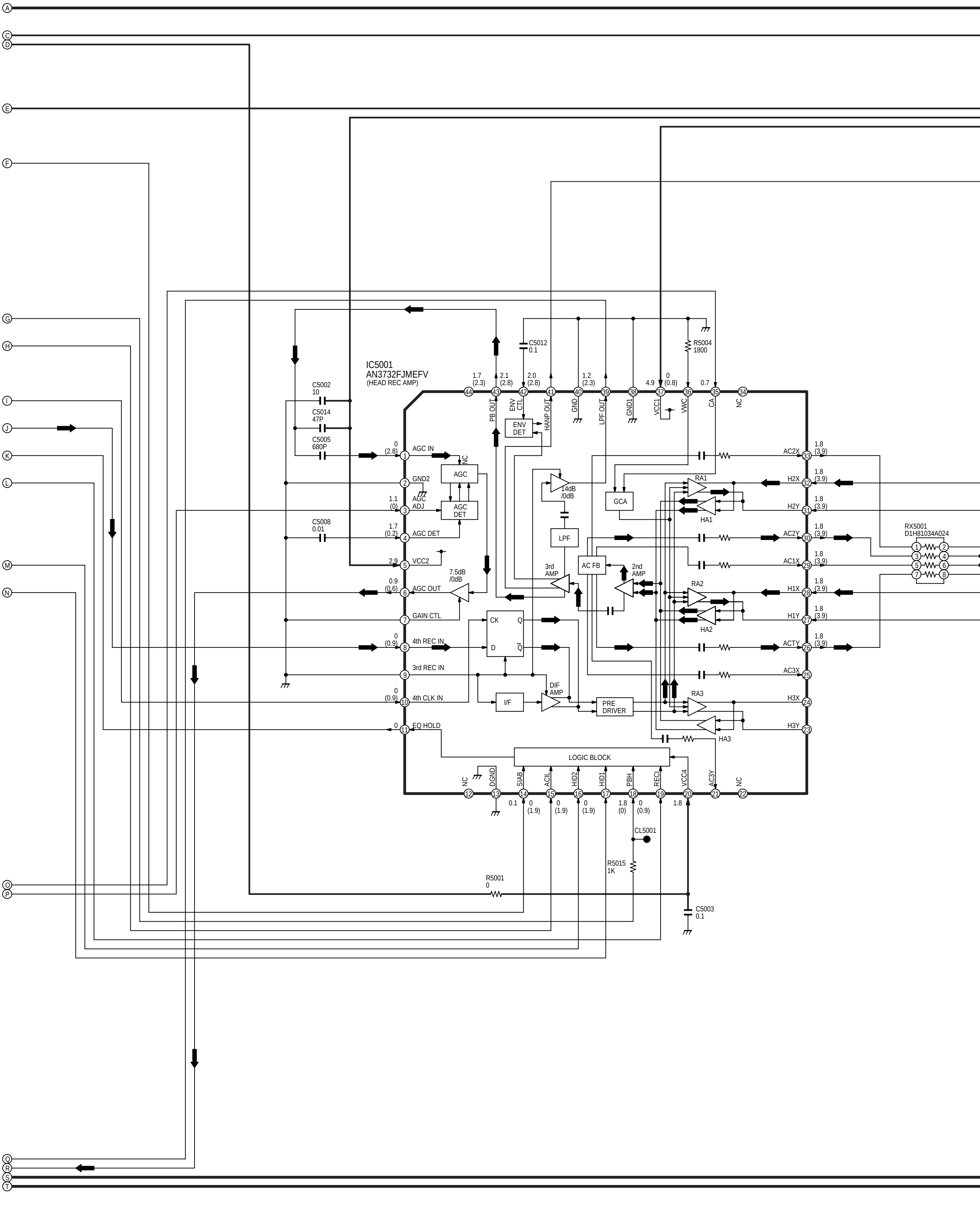

A
C
D
E
F
G
H
I
J
K
B
L
A26
A27
A28
R3003 4700
R3006 22
NC
CMD
NC
DATA(0)
DATA(1)
DATA(2)
DATA(3)
SDCLK
VSS
VDD32
DAC AVSS
CREF
CVBS
C OUT
DAC AVDD25
YREF
YVBS
Y OUT
LCD BVBS
LCD B OUT
LCD REF
LCD GVBS
LCD G OUT
LCD RVBS
LCD R OUT
VDD18
BUS MODE
VDD15
YC IN(7)
YC IN(6)
YC IN(5)
YC IN(4)
YC IN(3)
YC IN(2)
YC IN(1)
YC IN(0)
CLK27K
YC IO(7)
YC IO(6)
YC IO(5)
YC IO(4)
YC IO(3)
YC IO(2)
YC IO(1)
YC IO(0)
CLK27D
SHMF ID7
SHMF ID6
SHMF ID5
SHMF ID4
SHMF ID3
SHMF ID2
SHMF ID1
SHMF ID0
SHMF ICS
SHMF IRS
SHMF IWR
VDD8
SHMF IRD
SHMF INT
INF
FRP
L YC IO7
L YC IO6
L YC IO5
L YC IO4
L YC IO3
L YC IO2
L YC IO1
L YC IO0
CLK27C
ADEC DAT
AI DAT2
AI DAT1
DO DAT
VDD18
DO LRCK
DO MCK
DO BCK
C3078 10
C3052 4.7
C3058 0.1
C3057 0.01
R3034 10K
R3033 10K
R3036 10K
C3060 0.1
C3059 0.01
R3035 12K
C3061 0.1
R3038 10K
C3063 0.1
C3062 0.1
R3037 15K
C3064 0.1
R3077 0
R3040 47K
RL3032
RL3005
RX3005 D1H84704A024
A29
A30
A31
A32
A33
A34
A35
A36
B2
B3
B4
B5
B6
B7
B8
B9
B10
B33
B34
B35
B36
B37
B42
LB3203 J0JAC0000014
LB3201 J0JAC0000014
C3202 4.7
A37
A38
A39
B13
B31
B30
B26
B27
B28
B29
B32
CLK27A
XWEH
XWEL
XRE
DVDD18
AS
ADM(15)
ADM(14)
ADM(13)
DVSS
ADM(12)
ADM(11)
ADM(10)
DBR(0)
DBR(1)
DBR(2)
DBR(3)
REQR
ACKR
TSTCKI
TSTDT(0)
TSTDT(1)
TSTDT(2)
TSTDT(3)
TSTDT(4)
TSTDT(5)
TSTDT(6)
TSTDT(7)
TSTDT(8)
TSTDT(9)
VPD
XRST
TSTMD
CS
GESW
B18
B20
B21
B22
B23
B24
B25
C3229 0.1
R3211 1K
IC32
C1A
(RIP)
VRH
VRL
AVDD12(ADC1)
ADTEST
AVDD14(AMP1)
PBIN
AVDD15(ADC2)
ATFIN
AVSS15(ADC2)
AVDD13(ADC1/2)
C3006 0.1
C3204 0.1
C3203 6V4.7
C3207 0.1
C3208 0.1
CL3203
R3260 0
C3206 0.1
C3205 0.1

NV-GS200GD,GS120GD MAIN (VIDEO) SCHEMATIC DIAGRAM

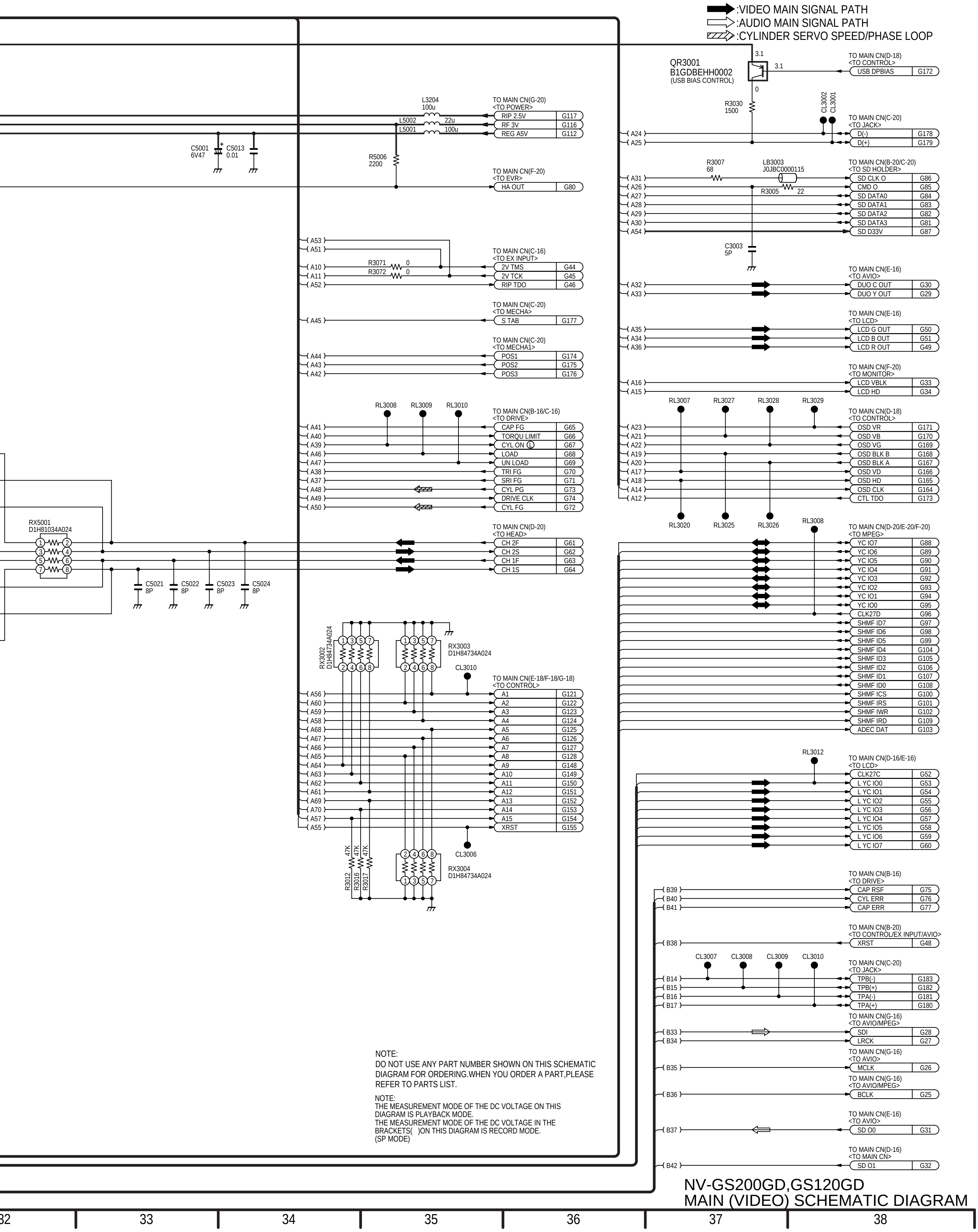
14
15
16
17
18
19
20


IC3201
C1AB00001695
(RIP)
RX3201
D1H84734A024
RX3202
D1H81034A024
R3218 1K
R3223 1K
R3222 1K
R3221 1K
R3219
10K
R3214
10K
R3215
10K
C3221
4.7
C3220
0.1
CL3207
CL3213
CL3208
CL3201
RL3011
C3219
0.1
C3218
0.1
C3209
0.01
C3201
0.1
R3202
270
R3201
1800
C3206
0.1
C3210
10
C3212
0.1
C3213
0.1
R3204
2700
R3206
2200
R3205
220
R3207
3300
C3215
0.1
ADM(12)
ADM(11)
ADM(10)
ADM(9)
DVDD18
ADM(8)
ADM(7)
ADM(6)
DVSS
ADM(5)
ADM(4)
ADM(3)
DVDD18
ADM(2)
ADM(1)
ADM(0)
CYLPG
DVSS
DRIVECLK
CYLFG
PBH
RECCTL
DVDD18
RECCLK
HSE
EQHLD
RECI
DVSS
SPA
HID2
HID1
TCK
TDO
TDI
TMS
TRST
DVSS
CAPRSF
CYLERR
CAPERR
RECCUR
AGCCTL
DVDD25
AVD11(VCO)
AVS11(VCO)
VCOIN
ATFIN
AVS15(ADC2)
AVD13(ADC1/2)
AVS13(ADC1/2)
AVD16(VREF)
VCORP
AVS16(VREF)
AVS22(DAC2/3)
OSO
VREF3
VREF2
AVD22(DAC2/3)
AFT0
VREF1
FPORP
AVS21(DAC1)
AVD21(DAC1)
FPO
A39
A40
A41
A42
A43
A44
A45
A46
A47
A48
A13
A49
A50
A51
A52
A53
B29
B32
B38
B39
B40
B41
B12
B19
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
20
21
22
23
24
25
26

NV-GS200GD,GS120GD MAIN (VIDEO) SCHEMATIC DIAGRAM


A
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
B
U
IC5001
AN3732FJMEFV
(HEAD REC AMP)
C5002
10
C5014
47P
C5005
680P
C5008
0.01
C5012
0.1
R5004
1800
C5003
0.1
R5001
0
R5015
1K
CL5001
RX5001
D1H81034A024
AGC IN
GND2
AGC ADJ
AGC DET
VCC2
AGC OUT
GAIN CTL
4th REC IN
3rd REC IN
4th CLK IN
EQ HOLD
AGC
AGC DET
7.5dB /0dB
CK
Q
D
I/F
DIF AMP
PRE DRIVER
LOGIC BLOCK
ENV DET
14dB /0dB
LPF
3rd AMP
AC FB
2nd AMP
GCA
RA1
HA1
RA2
HA2
RA3
HA3
PB OUT
ENV CTL
HANP OUT
GND
LPF OUT
GND1
VCC1
VWC
CA
NC
NC
DGND
SIAB
ACIL
HID2
HID1
PBH
RECL
VCC4
AC3Y
NC
AC2X
H2X
H2Y
AC2Y
AC1X
H1X
H1Y
ACTY
AC3X
H3X
H3Y
1.7 (2.3)
2.1 (2.8)
2.0 (2.8)
1.2 (2.3)
4.9
0 (0.8)
0.7
0 (2.8)
1.1 (0)
1.7 (0.2)
2.9
0.9 (0.6)
0 (0.9)
0 (0.9)
0
0.1
0 (1.9)
0 (1.9)
0 (1.9)
1.8 (0)
0 (0.9)
1.8
1.8 (3.9)
27
28
29
30
31
32

NV-GS200GD,GS120GD MAIN (VIDEO) SCHEMATIC DIAGRAM



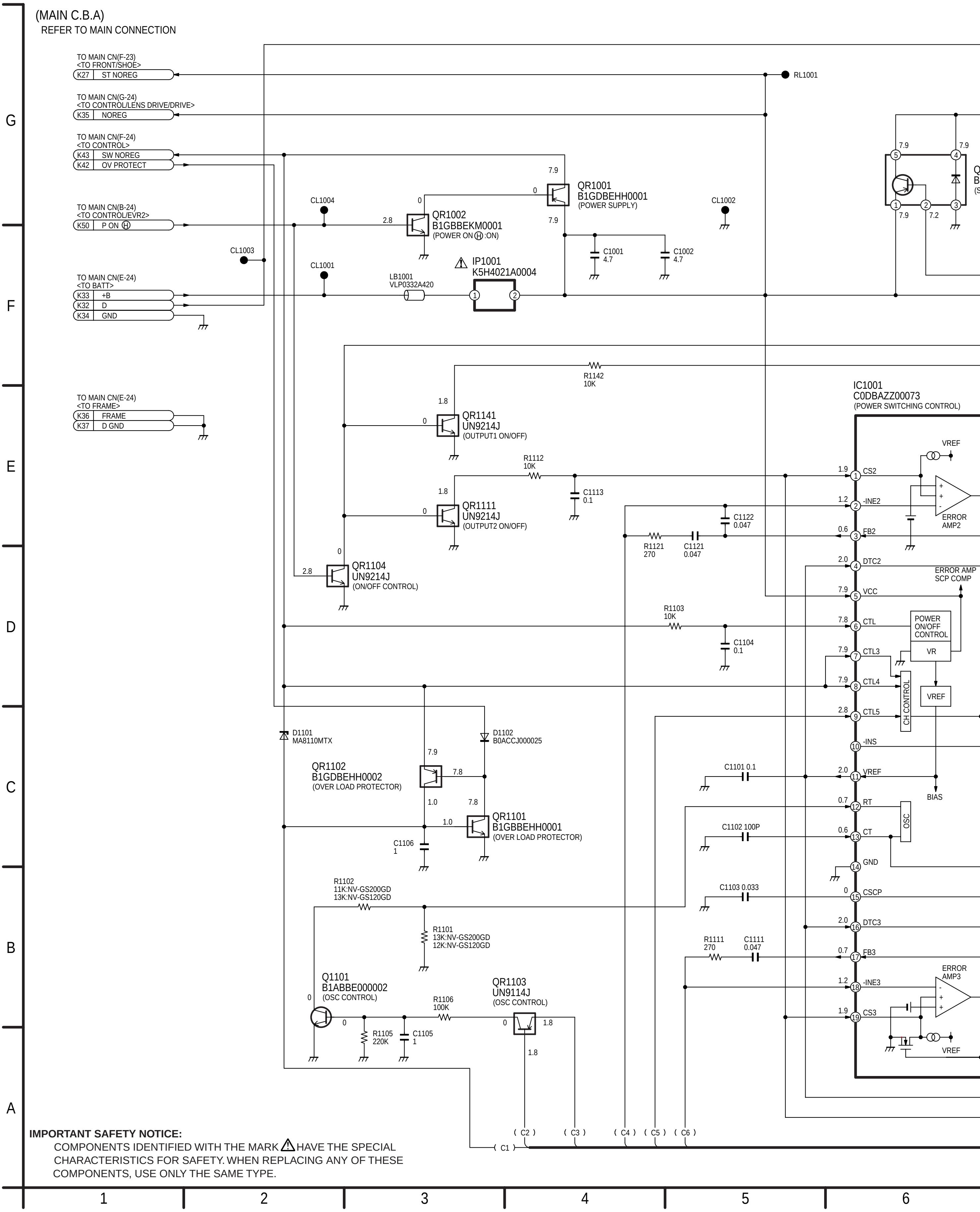
:VIDEO MAIN SIGNAL PATH
:AUDIO MAIN SIGNAL PATH
:CYLINDER SERVO SPEED/PHASE LOOP
QR3001
B1GDBEHH0002
(USB BIAS CONTROL)
3.1
3.1
0
R3030
1500
CL3002
CL3001
TO MAIN CN(D-18)
<TO CONTROL>
USB DPBIAS G172
TO MAIN CN(C-20)
<TO JACK>
D(-) G178
D(+) G179
A24
A25
L3204
100u
L5002 22u
L5001 100u
TO MAIN CN(G-20)
<TO POWER>
RIP 2.5V G117
RF 3V G116
REG A5V G112
C5001
6V47
C5013
0.01
R5006
2200
TO MAIN CN(F-20)
<TO EVR>
HA OUT G80
R3007
68
LB3003
J0JBC0000115
R3005 22
TO MAIN CN(B-20/C-20)
<TO SD HOLDER>
SD CLK O G86
CMD O G85
SD DATA0 G84
SD DATA1 G83
SD DATA2 G82
SD DATA3 G81
SD D33V G87
A31
A26
A27
A28
A29
A30
A54
C3003
5P
A53
A51
A10
A11
A52
R3071 0
R3072 0
TO MAIN CN(C-16)
<TO EX INPUT>
2V TMS G44
2V TCK G45
RIP TDO G46
TO MAIN CN(E-16)
<TO AVIO>
DUO C OUT G30
DUO Y OUT G29
A32
A33
TO MAIN CN(C-20)
<TO MECHA>
S TAB G177
A45
TO MAIN CN(E-16)
<TO LCD>
LCD G OUT G50
LCD B OUT G51
LCD R OUT G49
A35
A34
A36
TO MAIN CN(C-20)
<TO MECHA1>
POS1 G174
POS2 G175
POS3 G176
A44
A43
A42
TO MAIN CN(F-20)
<TO MONITOR>
LCD VBLK G33
LCD HD G34
A16
A15
RL3008
RL3009
RL3010
TO MAIN CN(B-16/C-16)
<TO DRIVE>
CAP FG G65
TORQU LIMIT G66
CYL ON Ⓛ G67
LOAD G68
UN LOAD G69
TRI FG G70
SRI FG G71
CYL PG G73
DRIVE CLK G74
CYL FG G72
A41
A40
A39
A46
A47
A38
A37
A48
A49
A50
RL3007
RL3027
RL3028
RL3029
TO MAIN CN(D-18)
<TO CONTROL>
OSD VR G171
OSD VB G170
OSD VG G169
OSD BLK B G168
OSD BLK A G167
OSD VD G166
OSD HD G165
OSD CLK G164
CTL TDO G173
A23
A21
A22
A19
A20
A17
A18
A14
A12
RL3020
RL3025
RL3026
RL3008
RX5001
D1H81034A024
TO MAIN CN(D-20)
<TO HEAD>
CH 2F G61
CH 2S G62
CH 1F G63
CH 1S G64
C5021
8P
C5022
8P
C5023
8P
C5024
8P
TO MAIN CN(D-20/E-20/F-20)
<TO MPEG>
YC IO7 G88
YC IO6 G89
YC IO5 G90
YC IO4 G91
YC IO3 G92
YC IO2 G93
YC IO1 G94
YC IO0 G95
CLK27D G96
SHMF ID7 G97
SHMF ID6 G98
SHMF ID5 G99
SHMF ID4 G104
SHMF ID3 G105
SHMF ID2 G106
SHMF ID1 G107
SHMF ID0 G108
SHMF ICS G100
SHMF IRS G101
SHMF IWR G102
SHMF IRD G109
ADEC DAT G103
RX3002
D1H84734A024
RX3003
D1H84734A024
CL3010
TO MAIN CN(E-18/F-18/G-18)
<TO CONTROL>
A1 G121
A2 G122
A3 G123
A4 G124
A5 G125
A6 G126
A7 G127
A8 G128
A9 G148
A10 G149
A11 G150
A12 G151
A13 G152
A14 G153
A15 G154
XRST G155
A56
A60
A59
A58
A68
A67
A66
A65
A64
A63
A62
A61
A69
A70
A57
A55
CL3006
RX3004
D1H84734A024
R3012 47K
R3016 47K
R3017 47K
RL3012
TO MAIN CN(D-16/E-16)
<TO LCD>
CLK27C G52
L YC IO0 G53
L YC IO1 G54
L YC IO2 G55
L YC IO3 G56
L YC IO4 G57
L YC IO5 G58
L YC IO6 G59
L YC IO7 G60
TO MAIN CN(B-16)
<TO DRIVE>
CAP RSF G75
CYL ERR G76
CAP ERR G77
B39
B40
B41
TO MAIN CN(B-20)
<TO CONTROL/EX INPUT/AVIO>
XRST G48
B38
CL3007
CL3008
CL3009
CL3010
TO MAIN CN(C-20)
<TO JACK>
TPB(-) G183
TPB(+) G182
TPA(-) G181
TPA(+) G180
B14
B15
B16
B17
TO MAIN CN(G-16)
<TO AVIO/MPEG>
SDI G28
LRCK G27
B33
B34
TO MAIN CN(G-16)
<TO AVIO>
MCLK G26
B35
TO MAIN CN(G-16)
<TO AVIO/MPEG>
BCLK G25
B36
TO MAIN CN(E-16)
<TO AVIO>
SD O0 G31
B37
TO MAIN CN(D-16)
<TO MAIN CN>
SD O1 G32
B42
32
33
34
35
36
37
38

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE.
(SP MODE)

NV-GS200GD,GS120GD
MAIN (VIDEO) SCHEMATIC DIAGRAM

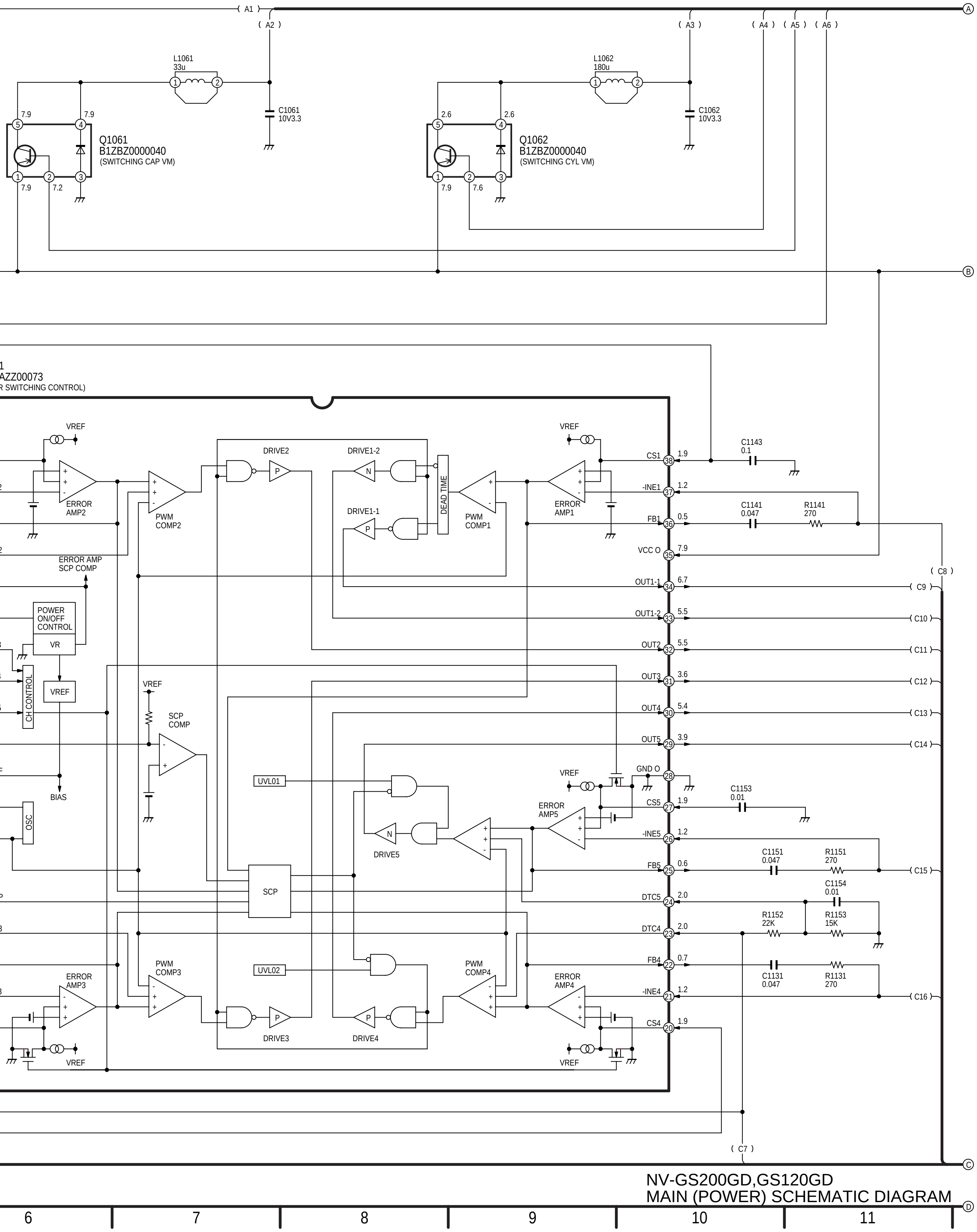
12.27. MAIN (POWER) SCHEMATIC DIAGRAM



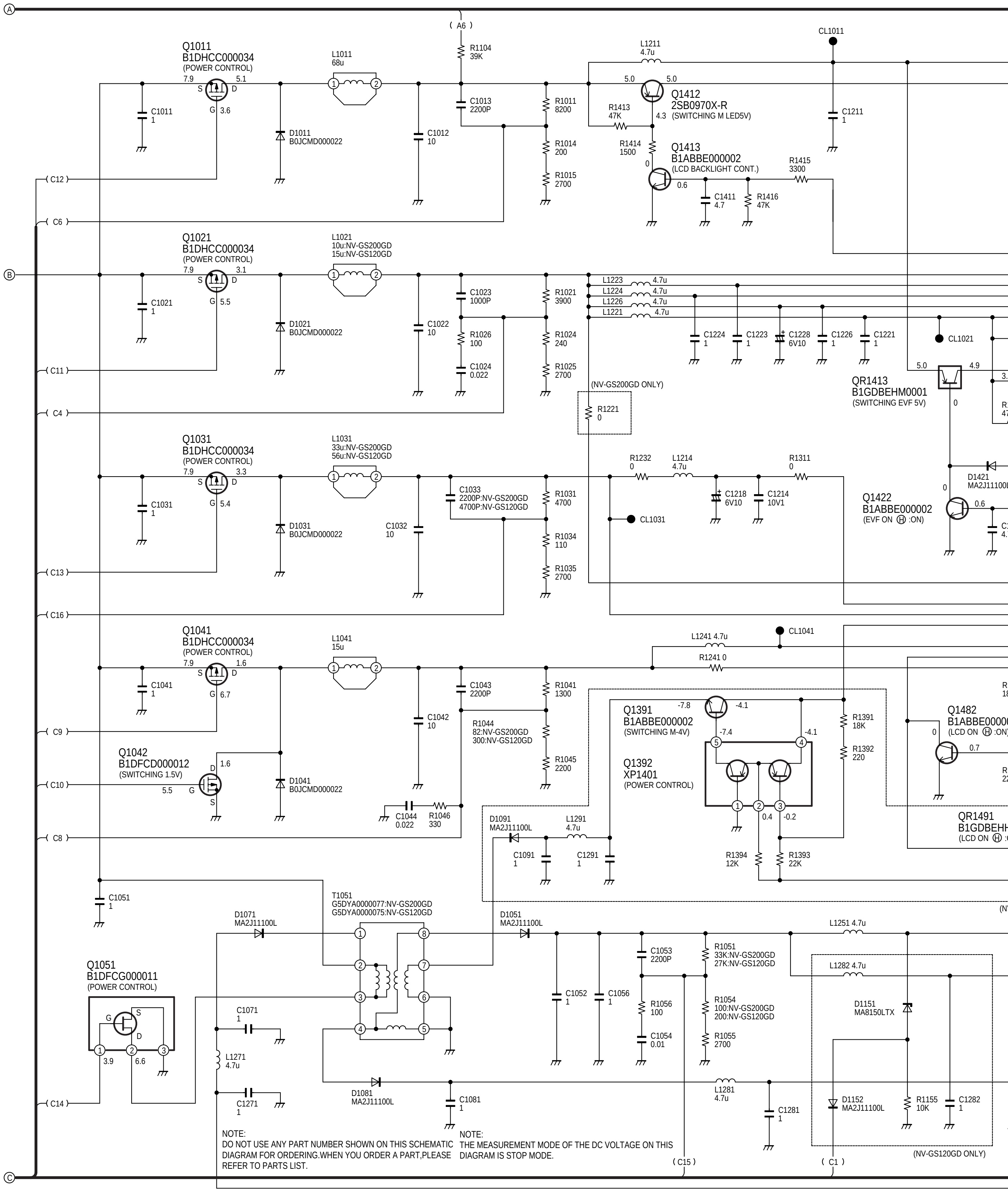
(MAIN C.B.A)
REFER TO MAIN CONNECTION
TO MAIN CN(F-23)
<TO FRONT/SHOE>
K27 ST NOREG
TO MAIN CN(G-24)
<TO CONTROL/LENS DRIVE/DRIVE>
K35 NOREG
TO MAIN CN(F-24)
<TO CONTROL>
K43 SW NOREG
K42 OV PROTECT
TO MAIN CN(B-24)
<TO CONTROL/EVR2>
K50 P ON Ⓗ
TO MAIN CN(E-24)
<TO BATT>
K33 +B
K32 D
K34 GND
TO MAIN CN(E-24)
<TO FRAME>
K36 FRAME
K37 D GND
RL1001
CL1004
CL1003
CL1001
CL1002
QR1002
B1GBBEKM0001
(POWER ON Ⓗ :ON)
QR1001
B1GDBEHH0001
(POWER SUPPLY)
C1001 4.7
C1002 4.7
LB1001
VLP0332A420
IP1001
K5H4021A0004
R1142 10K
IC1001
C0DBAZZ00073
(POWER SWITCHING CONTROL)
QR1141
UN9214J
(OUTPUT1 ON/OFF)
R1112 10K
C1113 0.1
QR1111
UN9214J
(OUTPUT2 ON/OFF)
C1122 0.047
R1121 270
C1121 0.047
QR1104
UN9214J
(ON/OFF CONTROL)
R1103 10K
C1104 0.1
D1101
MA8110MTX
D1102
B0ACCJ000025
QR1102
B1GDBEHH0002
(OVER LOAD PROTECTOR)
QR1101
B1GBBEHH0001
(OVER LOAD PROTECTOR)
C1106 1
C1101 0.1
C1102 100P
C1103 0.033
R1102
11K:NV-GS200GD
13K:NV-GS120GD
R1101
13K:NV-GS200GD
12K:NV-GS120GD
R1111 270
C1111 0.047
Q1101
B1ABBE000002
(OSC CONTROL)
R1106 100K
QR1103
UN9114J
(OSC CONTROL)
R1105 220K
C1105 1
1 CS2
2 -INE2
3 FB2
4 DTC2
5 VCC
6 CTL
7 CTL3
8 CTL4
9 CTL5
10 -INS
11 VREF
12 RT
13 CT
14 GND
15 CSCP
16 DTC3
17 FB3
18 -INE3
19 CS3
VREF
ERROR AMP2
ERROR AMP SCP COMP
POWER ON/OFF CONTROL
VR
CH CONTROL
VREF
BIAS
OSC
ERROR AMP3
VREF
C1
C2
C3
C4
C5
C6
7.9
0
2.8
1.8
1.9
1.2
0.6
2.0
7.8
0.7
1.0
7.2
G
F
E
D
C
B
A
1
2
3
4
5
6

IMPORTANT SAFETY NOTICE:

COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.


A1
A2
A3
A4
A5
A6
A
B
C
D
L1061
33u
L1062
180u
C1061
10V3.3
C1062
10V3.3
Q1061
B1ZBZ0000040
(SWITCHING CAP VM)
Q1062
B1ZBZ0000040
(SWITCHING CYL VM)
7.9
7.9
7.9
7.2
2.6
2.6
7.9
7.6
1
AZZ00073
R SWITCHING CONTROL)
VREF
ERROR AMP2
PWM COMP2
DRIVE2
DRIVE1-2
DRIVE1-1
DEAD TIME
PWM COMP1
ERROR AMP1
ERROR AMP SCP COMP
POWER ON/OFF CONTROL
VR
CH CONTROL
VREF
SCP COMP
BIAS
OSC
UVL01
UVL02
SCP
DRIVE5
ERROR AMP5
PWM COMP3
ERROR AMP3
DRIVE3
DRIVE4
PWM COMP4
ERROR AMP4
CS1 38 1.9
-INE1 37 1.2
FB1 36 0.5
VCC O 35 7.9
OUT1-1 34 6.7
OUT1-2 33 5.5
OUT2 32 5.5
OUT3 31 3.6
OUT4 30 5.4
OUT5 29 3.9
GND O 28
CS5 27 1.9
-INE5 26 1.2
FB5 25 0.6
DTC5 24 2.0
DTC4 23 2.0
FB4 22 0.7
-INE4 21 1.2
CS4 20 1.9
C1143
0.1
C1141
0.047
R1141
270
C1153
0.01
C1151
0.047
R1151
270
C1154
0.01
R1152
22K
R1153
15K
C1131
0.047
R1131
270
C7
C8
C9
C10
C11
C12
C13
C14
C15
C16
6
7
8
9
10
11

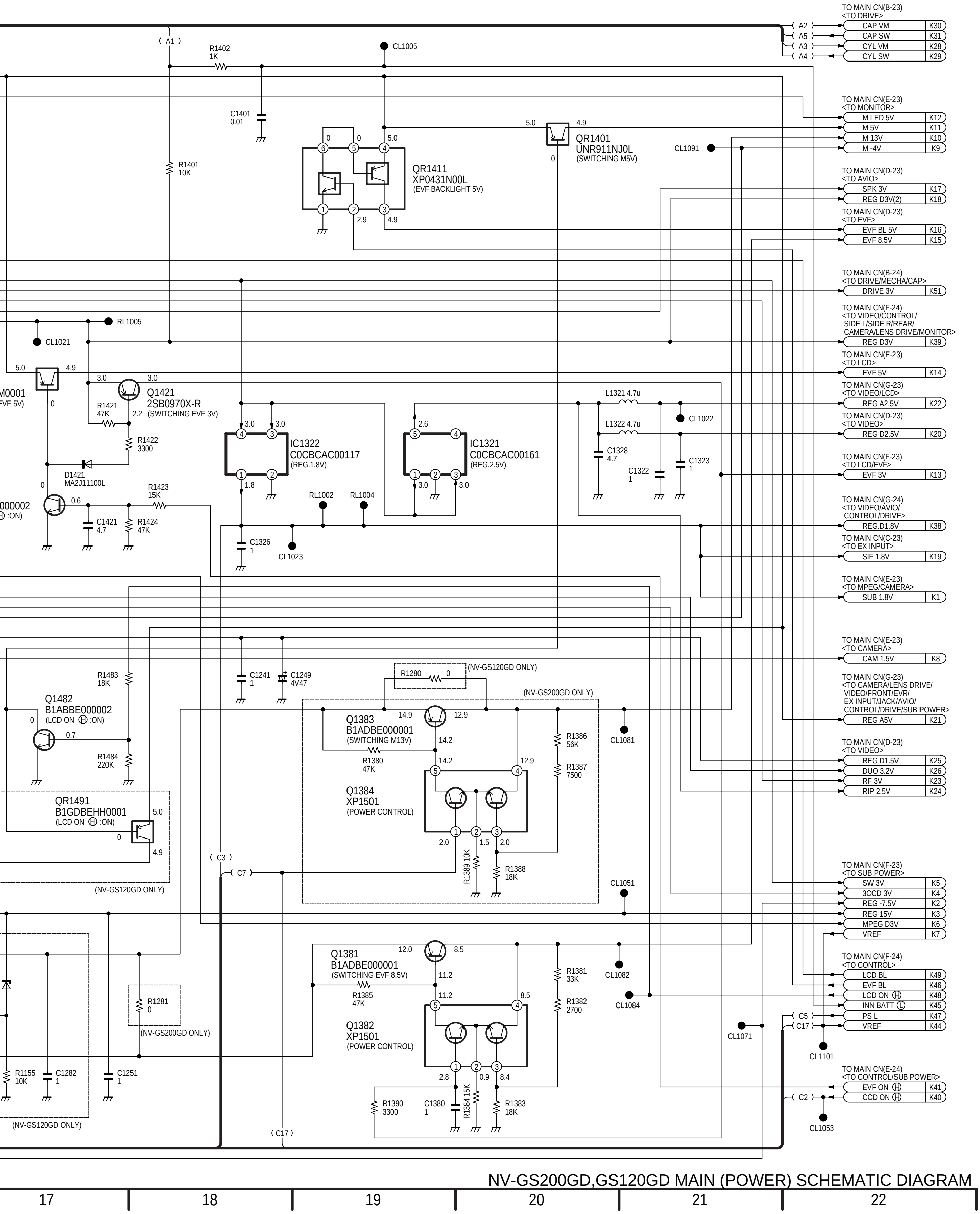
NV-GS200GD,GS120GD
MAIN (POWER) SCHEMATIC DIAGRAM


A
B
C
D
(A6)
Q1011
B1DHCC000034
(POWER CONTROL)
7.9
5.1
3.6
C1011
1
D1011
B0JCMD000022
L1011
68u
C1012
10
R1104
39K
C1013
2200P
R1011
8200
R1014
200
R1015
2700
L1211
4.7u
CL1011
Q1412
2SB0970X-R
(SWITCHING M LED5V)
5.0
5.0
4.3
R1413
47K
R1414
1500
Q1413
B1ABBE000002
(LCD BACKLIGHT CONT.)
0
0.6
C1411
4.7
R1416
47K
R1415
3300
C1211
1
(C12)
(C6)
Q1021
B1DHCC000034
(POWER CONTROL)
7.9
3.1
5.5
C1021
1
D1021
B0JCMD000022
L1021
10u:NV-GS200GD
15u:NV-GS120GD
C1022
10
C1023
1000P
R1026
100
C1024
0.022
R1021
3900
R1024
240
R1025
2700
L1223 4.7u
L1224 4.7u
L1226 4.7u
L1221 4.7u
C1224
1
C1223
1
C1228
6V10
C1226
1
C1221
1
CL1021
5.0
4.9
QR1413
B1GDBEHM0001
(SWITCHING EVF 5V)
0
(NV-GS200GD ONLY)
R1221
0
(C11)
(C4)
Q1031
B1DHCC000034
(POWER CONTROL)
7.9
3.3
5.4
C1031
1
D1031
B0JCMD000022
L1031
33u:NV-GS200GD
56u:NV-GS120GD
C1032
10
C1033
2200P:NV-GS200GD
4700P:NV-GS120GD
R1031
4700
R1034
110
R1035
2700
R1232
0
L1214
4.7u
C1218
6V10
C1214
10V1
R1311
0
CL1031
D1421
MA2J11100L
0
Q1422
B1ABBE000002
(EVF ON Ⓗ :ON)
0.6
(C13)
(C16)
Q1041
B1DHCC000034
(POWER CONTROL)
7.9
1.6
6.7
C1041
1
L1041
15u
C1042
10
C1043
2200P
R1041
1300
R1044
82:NV-GS200GD
300:NV-GS120GD
R1045
2200
L1241 4.7u
CL1041
R1241 0
Q1391
B1ABBE000002
(SWITCHING M-4V)
-7.8
-4.1
-7.4
-4.1
Q1392
XP1401
(POWER CONTROL)
0.4
-0.2
R1391
18K
R1392
220
R1394
12K
R1393
22K
Q1482
B1ABBE0000
(LCD ON Ⓗ :ON)
0
0.7
QR1491
B1GDBEH
(LCD ON Ⓗ
(C9)
Q1042
B1DFCD000012
(SWITCHING 1.5V)
1.6
5.5
G
D
S
D1041
B0JCMD000022
(C10)
C1044
0.022
R1046
330
D1091
MA2J11100L
L1291
4.7u
C1091
1
C1291
1
(C8)
C1051
1
T1051
G5DYA0000077:NV-GS200GD
G5DYA0000075:NV-GS120GD
D1071
MA2J11100L
D1051
MA2J11100L
L1251 4.7u
Q1051
B1DFCG000011
(POWER CONTROL)
3.9
6.6
C1071
1
L1271
4.7u
C1271
1
D1081
MA2J11100L
C1081
1
C1052
1
C1056
1
C1053
2200P
R1056
100
C1054
0.01
R1051
33K:NV-GS200GD
27K:NV-GS120GD
R1054
100:NV-GS200GD
200:NV-GS120GD
R1055
2700
L1282 4.7u
D1151
MA8150LTX
L1281
4.7u
C1281
1
D1152
MA2J11100L
R1155
10K
C1282
1
(NV-GS120GD ONLY)
(C14)
(C15)
(C1)
12
13
14
15
16
17

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

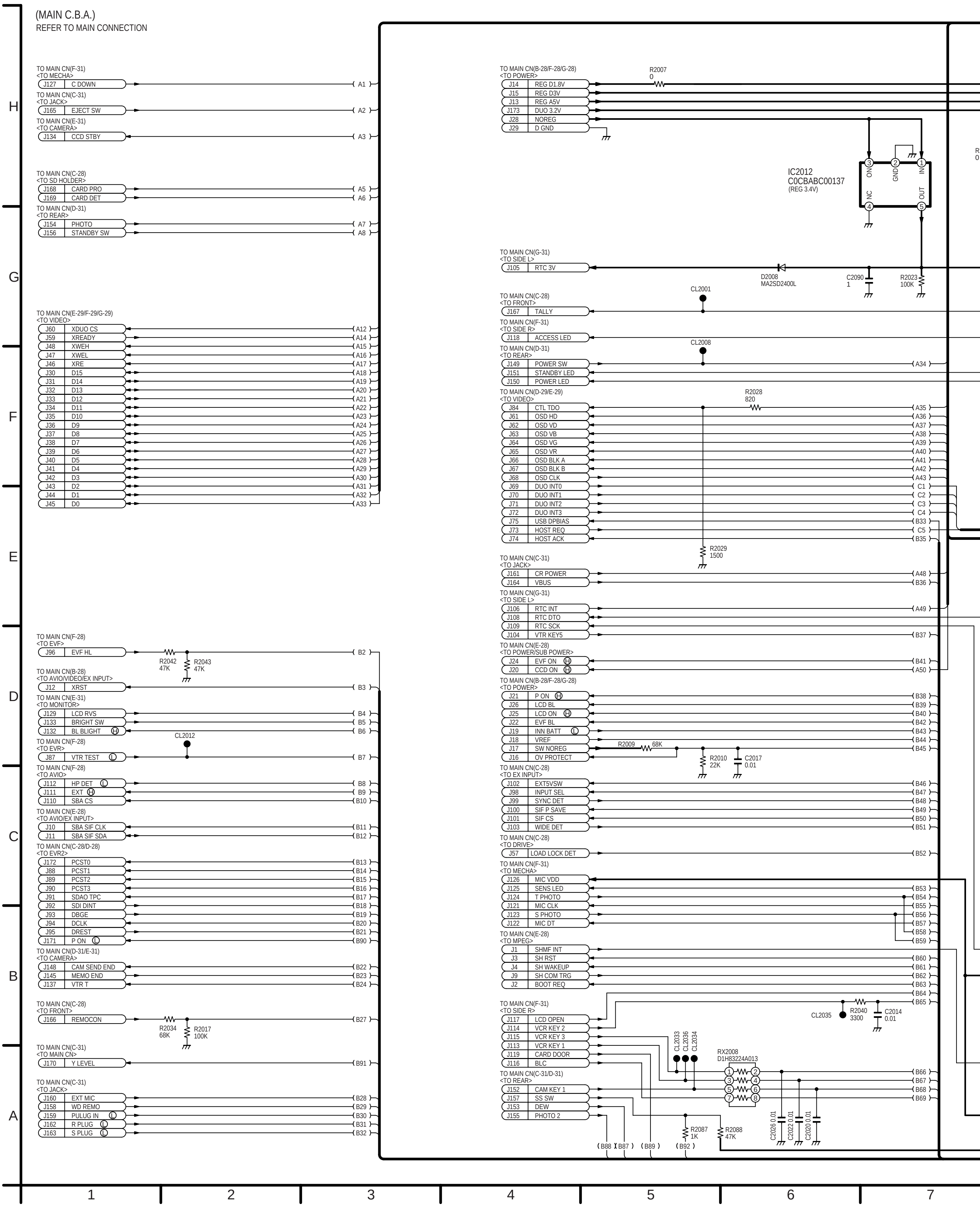
NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

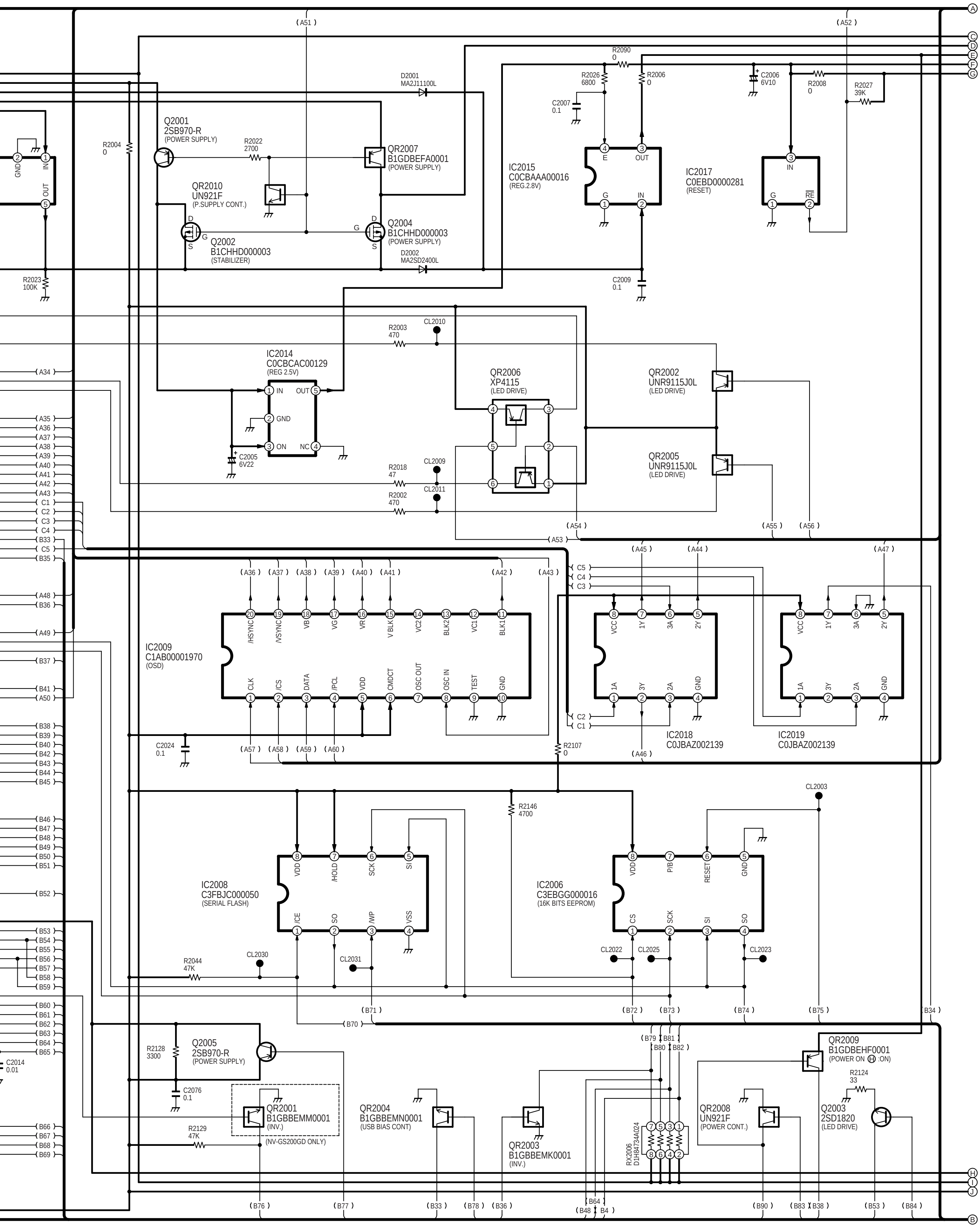
NV-GS200GD,GS120GD MAIN (POWER) SCHEMATIC DIAGRAM


TO MAIN CN(B-23)
<TO DRIVE>
A2
A5
A3
A4
CAP VM K30
CAP SW K31
CYL VM K28
CYL SW K29
A1
R1402
1K
CL1005
C1401
0.01
R1401
10K
TO MAIN CN(E-23)
<TO MONITOR>
M LED 5V K12
M 5V K11
M 13V K10
M -4V K9
5.0
4.9
0
QR1401
UNR911NJ0L
(SWITCHING M5V)
CL1091
QR1411
XP0431N00L
(EVF BACKLIGHT 5V)
2.9
TO MAIN CN(D-23)
<TO AVIO>
SPK 3V K17
REG D3V(2) K18
TO MAIN CN(D-23)
<TO EVF>
EVF BL 5V K16
EVF 8.5V K15
TO MAIN CN(B-24)
<TO DRIVE/MECHA/CAP>
DRIVE 3V K51
TO MAIN CN(F-24)
<TO VIDEO/CONTROL/
SIDE L/SIDE R/REAR/
CAMERA/LENS DRIVE/MONITOR>
REG D3V K39
TO MAIN CN(E-23)
<TO LCD>
EVF 5V K14
TO MAIN CN(G-23)
<TO VIDEO/LCD>
REG A2.5V K22
TO MAIN CN(D-23)
<TO VIDEO>
REG D2.5V K20
TO MAIN CN(F-23)
<TO LCD/EVF>
EVF 3V K13
TO MAIN CN(G-24)
<TO VIDEO/AVIO/
CONTROL/DRIVE>
REG.D1.8V K38
TO MAIN CN(C-23)
<TO EX INPUT>
SIF 1.8V K19
TO MAIN CN(E-23)
<TO MPEG/CAMERA>
SUB 1.8V K1
TO MAIN CN(E-23)
<TO CAMERA>
CAM 1.5V K8
TO MAIN CN(G-23)
<TO CAMERA/LENS DRIVE/
VIDEO/FRONT/EVR/
EX INPUT/JACK/AVIO/
CONTROL/DRIVE/SUB POWER>
REG A5V K21
TO MAIN CN(D-23)
<TO VIDEO>
REG D1.5V K25
DUO 3.2V K26
RF 3V K23
RIP 2.5V K24
TO MAIN CN(F-23)
<TO SUB POWER>
SW 3V K5
3CCD 3V K4
REG -7.5V K2
REG 15V K3
MPEG D3V K6
VREF K7
TO MAIN CN(F-24)
<TO CONTROL>
LCD BL K49
EVF BL K46
LCD ON Ⓗ K48
INN BATT Ⓛ K45
PS L K47
VREF K44
C5
C17
CL1071
CL1101
TO MAIN CN(E-24)
<TO CONTROL/SUB POWER>
EVF ON Ⓗ K41
CCD ON Ⓗ K40
C2
CL1053
RL1005
CL1021
M0001
EVF 5V)
Q1421
2SB0970X-R
(SWITCHING EVF 3V)
R1421
47K
2.2
R1422
3300
D1421
MA2J11100L
R1423
15K
000002
Ⓗ :ON)
0.6
C1421
4.7
R1424
47K
IC1322
C0CBCAC00117
(REG.1.8V)
1.8
IC1321
C0CBCAC00161
(REG.2.5V)
2.6
L1321 4.7u
L1322 4.7u
CL1022
C1328
4.7
C1322
1
C1323
1
RL1002
RL1004
C1326
1
CL1023
R1483
18K
Q1482
B1ABBE000002
(LCD ON Ⓗ :ON)
0.7
R1484
220K
QR1491
B1GDBEHH0001
(LCD ON Ⓗ :ON)
(NV-GS120GD ONLY)
C1241
1
C1249
4V47
R1280
0
(NV-GS120GD ONLY)
(NV-GS200GD ONLY)
Q1383
B1ADBE000001
(SWITCHING M13V)
14.9
12.9
14.2
R1380
47K
R1386
56K
R1387
7500
CL1081
Q1384
XP1501
(POWER CONTROL)
2.0
1.5
R1389 10K
R1388
18K
C3
C7
CL1051
Q1381
B1ADBE000001
(SWITCHING EVF 8.5V)
12.0
8.5
11.2
R1385
47K
R1381
33K
R1382
2700
CL1082
CL1084
Q1382
XP1501
(POWER CONTROL)
2.8
0.9
8.4
R1390
3300
C1380
1
R1384 15K
R1383
18K
R1281
0
(NV-GS200GD ONLY)
R1155
10K
C1282
1
C1251
1
(NV-GS120GD ONLY)
17
18
19
20
21
22

NV-GS200GD,GS120GD MAIN (POWER) SCHEMATIC DIAGRAM

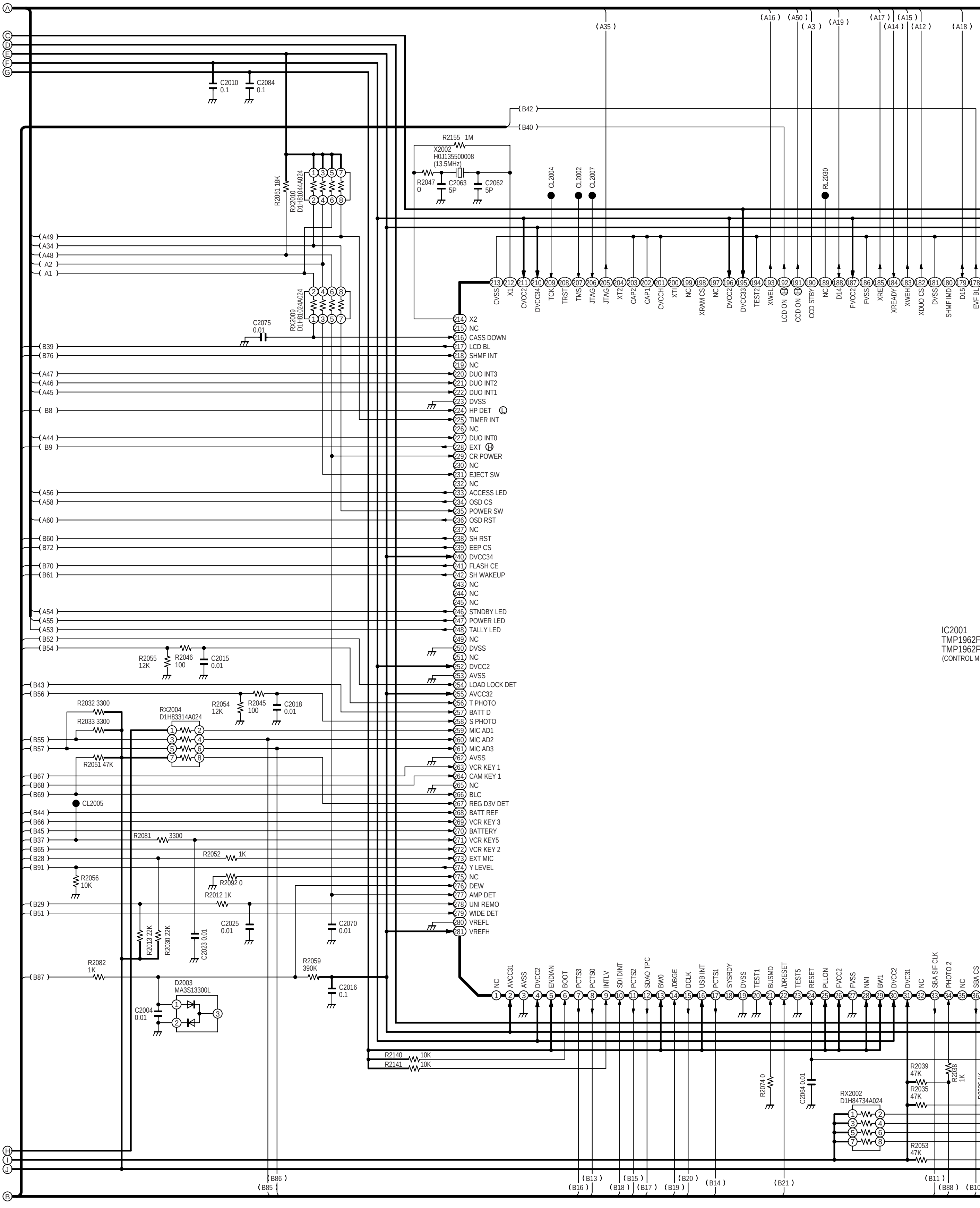
12.28. MAIN (CONTROL) SCHEMATIC DIAGRAM


(MAIN C.B.A.)
REFER TO MAIN CONNECTION
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
TO MAIN CN(F-31) <TO MECHA>
J127 C DOWN A1
TO MAIN CN(C-31) <TO JACK>
J165 EJECT SW A2
TO MAIN CN(E-31) <TO CAMERA>
J134 CCD STBY A3
TO MAIN CN(C-28) <TO SD HOLDER>
J168 CARD PRO A5
J169 CARD DET A6
TO MAIN CN(D-31) <TO REAR>
J154 PHOTO A7
J156 STANDBY SW A8
TO MAIN CN(E-29/F-29/G-29) <TO VIDEO>
J60 XDUO CS A12
J59 XREADY A14
J48 XWEH A15
J47 XWEL A16
J46 XRE A17
J30 D15 A18
J31 D14 A19
J32 D13 A20
J33 D12 A21
J34 D11 A22
J35 D10 A23
J36 D9 A24
J37 D8 A25
J38 D7 A26
J39 D6 A27
J40 D5 A28
J41 D4 A29
J42 D3 A30
J43 D2 A31
J44 D1 A32
J45 D0 A33
TO MAIN CN(F-28) <TO EVF>
J96 EVF HL B2
R2042 47K
R2043 47K
TO MAIN CN(B-28) <TO AVIO/VIDEO/EX INPUT>
J12 XRST B3
TO MAIN CN(E-31) <TO MONITOR>
J129 LCD RVS B4
J133 BRIGHT SW B5
J132 BL BLIGHT H B6
CL2012
TO MAIN CN(F-28) <TO EVR>
J87 VTR TEST L B7
TO MAIN CN(F-28) <TO AVIO>
J112 HP DET L B8
J111 EXT H B9
J110 SBA CS B10
TO MAIN CN(E-28) <TO AVIO/EX INPUT>
J10 SBA SIF CLK B11
J11 SBA SIF SDA B12
TO MAIN CN(C-28/D-28) <TO EVR2>
J172 PCST0 B13
J88 PCST1 B14
J89 PCST2 B15
J90 PCST3 B16
J91 SDAO TPC B17
J92 SDI DINT B18
J93 DBGE B19
J94 DCLK B20
J95 DREST B21
J171 P ON L B90
TO MAIN CN(D-31/E-31) <TO CAMERA>
J148 CAM SEND END B22
J145 MEMO END B23
J137 VTR T B24
TO MAIN CN(C-28) <TO FRONT>
J166 REMOCON B27
R2034 68K
R2017 100K
TO MAIN CN(C-31) <TO MAIN CN>
J170 Y LEVEL B91
TO MAIN CN(C-31) <TO JACK>
J160 EXT MIC B28
J158 WD REMO B29
J159 PULUG IN L B30
J162 R PLUG L B31
J163 S PLUG L B32
TO MAIN CN(B-28/F-28/G-28) <TO POWER>
J14 REG D1.8V
J15 REG D3V
J13 REG A5V
J173 DUO 3.2V
J28 NOREG
J29 D GND
R2007 0
IC2012
C0CBABC00137
(REG 3.4V)
3 ON
2 GND
1 IN
4 NC
5 OUT
TO MAIN CN(G-31) <TO SIDE L>
J105 RTC 3V
D2008 MA2SD2400L
C2090 1
R2023 100K
CL2001
TO MAIN CN(C-28) <TO FRONT>
J167 TALLY
TO MAIN CN(F-31) <TO SIDE R>
J118 ACCESS LED
CL2008
TO MAIN CN(D-31) <TO REAR>
J149 POWER SW A34
J151 STANDBY LED
J150 POWER LED
TO MAIN CN(D-29/E-29) <TO VIDEO>
R2028 820
J84 CTL TDO A35
J61 OSD HD A36
J62 OSD VD A37
J63 OSD VB A38
J64 OSD VG A39
J65 OSD VR A40
J66 OSD BLK A A41
J67 OSD BLK B A42
J68 OSD CLK A43
J69 DUO INT0 C1
J70 DUO INT1 C2
J71 DUO INT2 C3
J72 DUO INT3 C4
J75 USB DPBIAS B33
J73 HOST REQ C5
J74 HOST ACK B35
R2029 1500
TO MAIN CN(C-31) <TO JACK>
J161 CR POWER A48
J164 VBUS B36
TO MAIN CN(G-31) <TO SIDE L>
J106 RTC INT A49
J108 RTC DTO
J109 RTC SCK
J104 VTR KEY5 B37
TO MAIN CN(E-28) <TO POWER/SUB POWER>
J24 EVF ON H B41
J20 CCD ON H A50
TO MAIN CN(B-28/F-28/G-28) <TO POWER>
J21 P ON H B38
J26 LCD BL B39
J25 LCD ON H B40
J22 EVF BL B42
J19 INN BATT L B43
J18 VREF B44
J17 SW NOREG B45
J16 OV PROTECT
R2009 68K
R2010 22K
C2017 0.01
TO MAIN CN(C-28) <TO EX INPUT>
J102 EXT5VSW B46
J98 INPUT SEL B47
J99 SYNC DET B48
J100 SIF P SAVE B49
J101 SIF CS B50
J103 WIDE DET B51
TO MAIN CN(C-28) <TO DRIVE>
J57 LOAD LOCK DET B52
TO MAIN CN(F-31) <TO MECHA>
J126 MIC VDD
J125 SENS LED B53
J124 T PHOTO B54
J121 MIC CLK B55
J123 S PHOTO B56
J122 MIC DT B57
B58
B59
TO MAIN CN(E-28) <TO MPEG>
J1 SHMF INT
J3 SH RST B60
J4 SH WAKEUP B61
J9 SH COM TRG B62
J2 BOOT REQ B63
B64
B65
TO MAIN CN(F-31) <TO SIDE R>
J117 LCD OPEN
J114 VCR KEY 2
J115 VCR KEY 3
J113 VCR KEY 1
J119 CARD DOOR
J116 BLC
CL2035
R2040 3300
C2014 0.01
CL2033
CL2036
CL2034
RX2008 D1H83224A013
TO MAIN CN(C-31/D-31) <TO REAR>
J152 CAM KEY 1
J157 SS SW
J153 DEW
J155 PHOTO 2
B66
B67
B68
B69
R2087 1K
R2088 47K
C2026 0.01
C2022 0.01
C2020 0.01
B88
B87
B89
B92


A
C
D
E
F
G
H
I
J
B
K
A51
A52
R2090 0
R2026 6800
R2006 0
C2006 6V10
R2008 0
R2027 39K
C2007 0.1
D2001 MA2J11100L
R2004 0
Q2001 2SB970-R (POWER SUPPLY)
R2022 2700
QR2007 B1GDBEFA0001 (POWER SUPPLY)
QR2010 UN921F (P.SUPPLY CONT.)
Q2002 B1CHHD000003 (STABILIZER)
Q2004 B1CHHD000003 (POWER SUPPLY)
D2002 MA2SD2400L
R2023 100K
IC2015 C0CBAAA00016 (REG.2.8V)
IC2017 C0EBD0000281 (RESET)
C2009 0.1
GND
IN
OUT
E
G
RE
IC2014 C0CBCAC00129 (REG 2.5V)
ON
NC
C2005 6V22
R2003 470
CL2010
QR2006 XP4115 (LED DRIVE)
QR2002 UNR9115J0L (LED DRIVE)
QR2005 UNR9115J0L (LED DRIVE)
R2018 47
CL2009
CL2011
R2002 470
A34
A35 A36 A37 A38 A39 A40 A41 A42 A43
C1 C2 C3 C4 B33 C5 B35
A48 B36 A49 B37 B41 A50
B38 B39 B40 B42 B43 B44 B45
B46 B47 B48 B49 B50 B51 B52
B53 B54 B55 B56 B57 B58 B59
B60 B61 B62 B63 B64 B65
B66 B67 B68 B69
A53 A54 A55 A56
A45 A44 A47 A46
IC2009 C1AB00001970 (OSD)
/HSYNC /VSYNC VB VG VR V BLK VC2 BLK2 VC1 BLK1
CLK /CS DATA /PCL VDD CMDCT OSC OUT OSC IN TEST GND
A57 A58 A59 A60
C2024 0.1
VCC 1Y 3A 2Y 1A 3Y 2A GND
IC2018 C0JBAZ002139
IC2019 C0JBAZ002139
R2107 0
CL2003
R2146 4700
IC2008 C3FBJC000050 (SERIAL FLASH)
VDD /HOLD SCK SI /CE SO /WP VSS
IC2006 C3EBGG000016 (16K BITS EEPROM)
VDD P/B RESET GND CS SCK SI SO
CL2022 CL2025 CL2023
CL2030 CL2031
R2044 47K
B71 B70 B72 B73 B74 B75 B34
R2128 3300
Q2005 2SB970-R (POWER SUPPLY)
C2014 0.01
C2076 0.1
QR2001 B1GBBEMM0001 (INV.) (NV-GS200GD ONLY)
R2129 47K
QR2004 B1GBBEMN0001 (USB BIAS CONT)
QR2003 B1GBBEMK0001 (INV.)
B79 B81 B80 B82
RX2006 D1H84734A024
QR2008 UN921F (POWER CONT.)
QR2009 B1GDBEHF0001 (POWER ON H :ON)
R2124 33
Q2003 2SD1820 (LED DRIVE)
B76 B77 B33 B78 B36 B64 B48 B4 B90 B83 B38 B53 B84

NV-GS200GD,GS120GD MAIN (CONTROL) SCHEMATIC DIAGRAM

7 8 9 10 11 12 13


A
C
D
E
F
G
H
I
J
B
K
A35
A16
A50
A3
A19
A17
A15
A14
A12
A18
B42
B40
C2010 0.1
C2084 0.1
R2155 1M
X2002
H0J135500008
(13.5MHz)
R2047 0
C2063 5P
C2062 5P
CL2004
CL2002
CL2007
RL2030
R2061 18K
RX2010 D1H81044A024
RX2009 D1H81024A024
C2075 0.01
213 CVSS
212 X1
211 CVCC2
210 DVCC34
209 TCK
208 TRST
207 TMS
206 JTAG
205 JTAG
204 XT2
203 CAP2
202 CAP1
201 CVCCH
200 XT1
199 NC
198 XRAM CS
197 NC
196 DVCC2
195 DVCC33
194 TEST2
193 XWEL
192 LCD ON H
191 CCD ON H
190 CCD STBY
189 NC
188 D14
187 FVCC2
186 FVSS
185 XRE
184 XREADY
183 XWEH
182 XDUO CS
181 DVSS
180 SHMF IMD
179 D15
178 EVF BL
214 X2
215 NC
216 CASS DOWN
217 LCD BL
218 SHMF INT
219 NC
220 DUO INT3
221 DUO INT2
222 DUO INT1
223 DVSS
224 HP DET L
225 TIMER INT
226 NC
227 DUO INT0
228 EXT H
229 CR POWER
230 NC
231 EJECT SW
232 NC
233 ACCESS LED
234 OSD CS
235 POWER SW
236 OSD RST
237 NC
238 SH RST
239 EEP CS
240 DVCC34
241 FLASH CE
242 SH WAKEUP
243 NC
244 NC
245 NC
246 STNDBY LED
247 POWER LED
248 TALLY LED
249 NC
250 DVSS
251 NC
252 DVCC2
253 AVSS
254 LOAD LOCK DET
255 AVCC32
256 T PHOTO
257 BATT D
258 S PHOTO
259 MIC AD1
260 MIC AD2
261 MIC AD3
262 AVSS
263 VCR KEY 1
264 CAM KEY 1
265 NC
266 BLC
267 REG D3V DET
268 BATT REF
269 VCR KEY 3
270 BATTERY
271 VCR KEY5
272 VCR KEY 2
273 EXT MIC
274 Y LEVEL
275 NC
276 DEW
277 AMP DET
278 UNI REMO
279 WIDE DET
280 VREFL
281 VREFH
1 NC
2 AVCC31
3 AVSS
4 DVCC2
5 ENDIAN
6 BOOT
7 PCTS3
8 PCTS0
9 INTLV
10 SDI DINT
11 PCTS2
12 SDAO TPC
13 BW0
14 DBGE
15 DCLK
16 USB INT
17 PCTS1
18 SYSRDY
19 DVSS
20 TEST1
21 BUSMD
22 /DRESET
23 TEST5
24 RESET
25 PLLON
26 FVCC2
27 FVSS
28 NMI
29 BW1
30 DVCC2
31 DVC31
32 NC
33 SBA SIF CLK
34 PHOTO 2
35 NC
36 SBA CS
A49
A34
A48
A2
A1
B39
B76
A47
A46
A45
B8
A44
B9
A56
A58
A60
B60
B72
B70
B61
A54
A55
A53
B52
B54
B43
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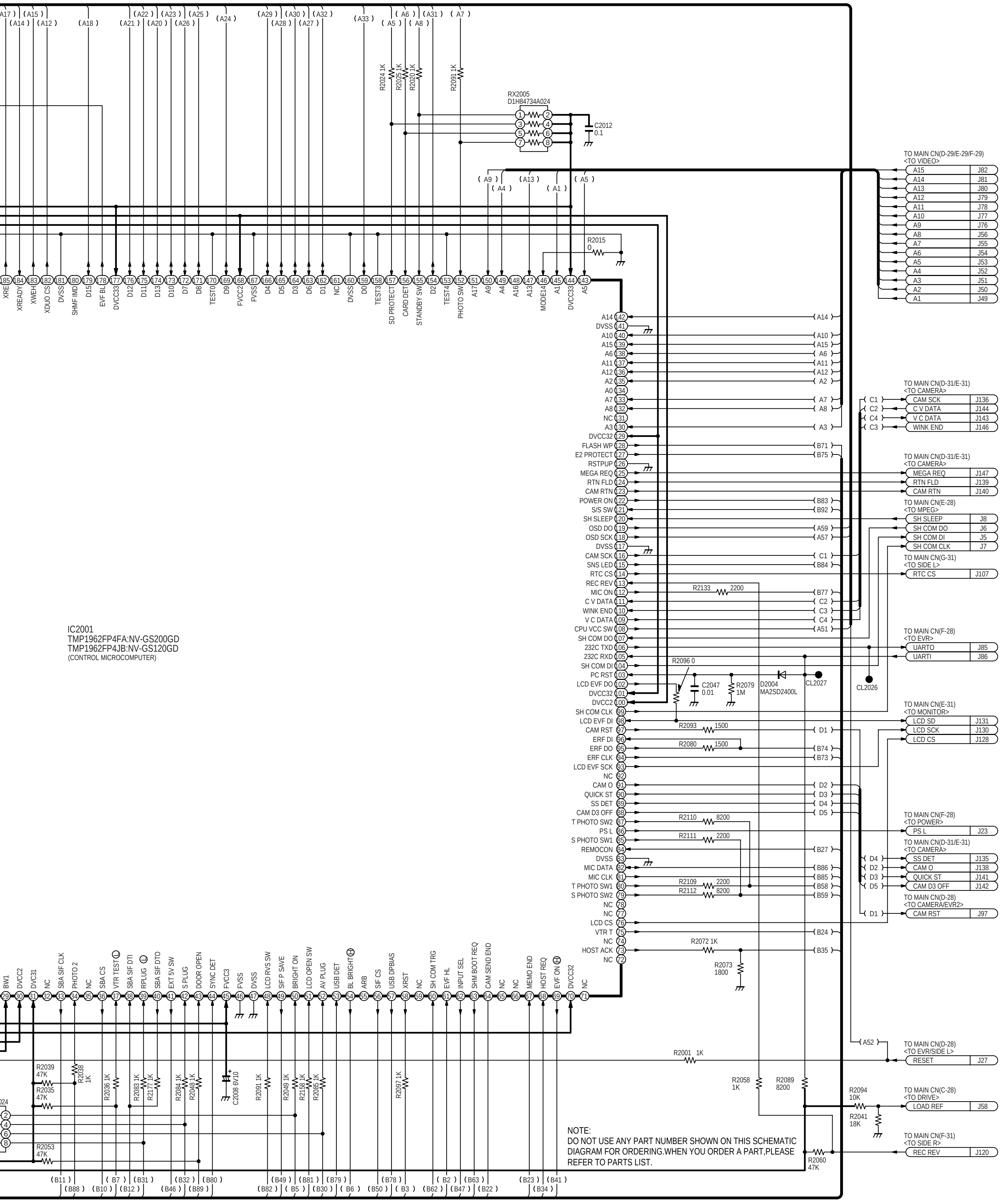
B55
B57
B67
B68
B69
B44
B66
B45
B37
B65
B28
B91
B29
B51
B87
R2055 12K
R2046 100
C2015 0.01
R2032 3300
R2033 3300
RX2004 D1H83314A024
R2054 12K
R2045 100
C2018 0.01
R2051 47K
CL2005
R2081 3300
R2052 1K
R2056 10K
R2092 0
R2012 1K
C2025 0.01
C2070 0.01
R2013 22K
R2030 22K
C2023 0.01
R2082 1K
R2059 390K
C2016 0.1
D2003 MA3S13300L
C2004 0.01
R2140 10K
R2141 10K
R2074 0
C2064 0.01
R2039 47K
R2038 1K
R2035 47K
RX2002 D1H84734A024
R2053 47K
IC2001
TMP1962F
TMP1962F
(CONTROL M
B86
B85
B13
B16
B15
B18
B17
B20
B19
B14
B21
B11
B88
B10

NV-GS200GD,GS120GD MAIN (CONTROL) SCHEMATIC DIAGRAM

14 15 16 17 18 19


IC2001
TMP1962FP4FA:NV-GS200GD
TMP1962FP4JB:NV-GS120GD
(CONTROL MICROCOMPUTER)
RX2005
D1H84734A024
C2012
0.1
R2015
0
R2024 1K
R2025 1K
R2020 1K
R2091 1K
R2133 2200
R2096 0
C2047
0.01
R2079
1M
D2004
MA2SD2400L
CL2027
CL2026
R2093 1500
R2080 1500
R2110 8200
R2111 2200
R2109 2200
R2112 8200
R2072 1K
R2073
1800
R2001 1K
R2058
1K
R2089
8200
R2094
10K
R2041
18K
R2060
47K
R2039
47K
R2035
47K
R2053
47K
R2038
1K
C2008 6V10
TO MAIN CN(D-29/E-29/F-29)
<TO VIDEO>
A15 J82
A14 J81
A13 J80
A12 J79
A11 J78
A10 J77
A9 J76
A8 J56
A7 J55
A6 J54
A5 J53
A4 J52
A3 J51
A2 J50
A1 J49
TO MAIN CN(D-31/E-31)
<TO CAMERA>
CAM SCK J136
C V DATA J144
V C DATA J143
WINK END J146
TO MAIN CN(D-31/E-31)
<TO CAMERA>
MEGA REQ J147
RTN FLD J139
CAM RTN J140
TO MAIN CN(E-28)
<TO MPEG>
SH SLEEP J8
SH COM DO J6
SH COM DI J5
SH COM CLK J7
TO MAIN CN(G-31)
<TO SIDE L>
RTC CS J107
TO MAIN CN(F-28)
<TO EVR>
UARTO J85
UARTI J86
TO MAIN CN(E-31)
<TO MONITOR>
LCD SD J131
LCD SCK J130
LCD CS J128
TO MAIN CN(F-28)
<TO POWER>
PS L J23
TO MAIN CN(D-31/E-31)
<TO CAMERA>
SS DET J135
CAM O J138
QUICK ST J141
CAM D3 OFF J142
TO MAIN CN(D-28)
<TO CAMERA/EVR2>
CAM RST J97
TO MAIN CN(D-28)
<TO EVR/SIDE L>
RESET J27
TO MAIN CN(C-28)
<TO DRIVE>
LOAD REF J58
TO MAIN CN(F-31)
<TO SIDE R>
REC REV J120

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-GS200GD,GS120GD MAIN (CONTROL) SCHEMATIC DIAGRAM

20 21 22 23 24 25

12.28.1. CONTROL DC VOLTAGE CHART (SP MODE)

ICs DC VOLTAGE CHART (SP MODE)

Ref. No.	IC2001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	-	2.8	-	2.5	2.5	2.5	-	-	2.5	-	-	-	2.5	-	-	2.5	-	-	-	-
PLAY	-	2.8	-	2.5	2.5	2.5	-	-	2.5	-	-	-	2.5	-	-	2.5	-	-	-	-
REC	-	2.8	-	2.5	2.5	2.5	-	-	2.5	-	-	-	2.5	-	-	2.5	-	-	-	-
F.F.	-	2.8	-	2.5	2.5	2.5	-	-	2.5	-	-	-	2.5	-	-	2.5	-	-	-	-
REW	-	2.8	-	2.5	2.5	2.5	-	-	2.5	-	-	-	2.5	-	-	2.5	-	-	-	-

Ref. No.	IC2001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	-	-	2.8	2.5	2.5	-	2.5	2.5	2.5	1.8	-	1.9	1.8	-	1.9	1.9	0.6	1.9	1.4
PLAY	0	-	-	2.8	2.5	2.5	-	2.5	2.5	2.5	1.8	-	1.9	1.8	-	1.9	1.9	0.6	1.9	1.4
REC	0	-	-	2.8	2.5	2.5	-	2.5	2.5	2.5	1.8	-	1.9	1.8	-	1.9	1.9	0.6	1.9	1.4
F.F.	0	-	-	2.8	2.5	2.5	-	2.5	2.5	2.5	1.8	-	1.9	1.8	-	1.9	1.9	0.6	1.9	1.4
REW	0	-	-	2.8	2.5	2.5	-	2.5	2.5	2.5	1.8	-	1.9	1.8	-	1.9	1.9	0.6	1.9	1.4

Ref. No.	IC2001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	2.9	1.9	0	1.7	3.2	-	-	0	-	1.7	1.8	1.8	1.7	2.8	-	-	1.7	1.8	-	0
PLAY	2.9	1.9	0	1.7	3.2	-	-	0	-	1.7	1.8	1.8	1.7	2.8	-	-	1.7	1.8	-	0
REC	2.9	1.9	0	1.7	3.2	-	-	0	-	1.7	1.8	1.8	1.7	2.8	-	-	1.7	1.8	-	0
F.F.	2.9	1.9	0	1.7	3.2	-	-	0	-	1.7	1.8	1.8	1.7	2.8	-	-	1.7	1.8	-	0
REW	2.9	1.9	0	1.7	3.2	-	-	0	-	1.7	1.8	1.8	1.7	2.8	-	-	1.7	1.8	-	0

Ref. No.	IC2001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	1.8	0.6	-	-	-	0	0	2.8	2.8	-	-	0.6	-	2.5	0	-	-	0	0
PLAY	0	1.8	0.6	-	-	-	0	0	2.8	2.8	-	-	0.6	-	2.5	0	-	-	0	0
REC	0	1.8	0.6	-	-	-	0	0	2.8	2.8	-	-	0.6	-	2.5	0	-	-	0	0
F.F.	0	1.8	0.6	-	-	-	0	0	2.8	2.8	-	-	0.6	-	2.5	0	-	-	0	0
REW	0	1.8	0.6	-	-	-	0	0	2.8	2.8	-	-	0.6	-	2.5	0	-	-	0	0

Ref. No.	IC2001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	2.8	2.8	-	3.6	0	2.8	0	0	0	2.5	2.5	-	2.8	2.8	0	2.7	2.0	0	2.4	2.5
PLAY	2.8	2.8	-	0	0	2.8	0	0	0	2.5	2.5	-	2.8	2.8	0.5	2.7	2.0	0.5	2.4	2.5
REC	2.8	2.8	-	0	0	2.8	0	2.8	0	2.5	2.5	-	2.8	2.8	0.5	2.7	2.0	0.5	2.4	2.5
F.F.	2.8	2.8	-	0	0	2.8	0	0	0	2.5	2.5	-	2.8	2.8	0	2.7	2.0	0	2.4	2.5
REW	2.8	2.8	-	0	0	2.8	0	0	0	2.5	2.5	-	2.8	2.8	0	2.7	2.0	0	2.4	2.5

Ref. No.	IC2001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	2.8	0	2.5	1.9	2.7	2.7	2.5	2.8	2.0	-	-	2.8	2.8	0	2.8	2.4	-	0	0	0
PLAY	2.8	0.5	2.5	1.9	2.7	2.7	2.5	2.8	2.0	-	-	2.8	2.8	0	2.4	2.4	-	0	0	0
REC	2.8	0.5	2.5	1.9	2.7	2.7	2.5	2.8	2.0	-	-	2.8	2.8	2.0	2.8	2.4	-	0	0	0
F.F.	2.8	0	2.5	1.9	2.7	2.7	2.5	2.8	2.0	-	-	2.8	2.8	2.0	2.4	2.4	-	0	0	0
REW	2.8	0	2.5	1.9	2.7	2.7	2.5	2.8	2.0	-	-	2.8	2.8	2.0	2.4	2.4	-	0	0	0

Ref. No.	IC2001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
STOP	2.8	2.8	2.5	1.3	2.7	-	0	2.7	2.8	0.3	-	0.6	1.0	-	0.8	0.3	0.1	0.1	0.6	0.3
PLAY	2.8	2.8	2.5	1.3	2.7	-	0	2.7	2.8	0.3	-	0.6	1.0	-	0.8	0.3	0.1	0.1	0.6	0.3
REC	2.8	2.8	2.5	1.3	2.7	-	0	2.7	2.8	0.3	-	0.6	1.0	-	0.8	0.3	0.1	0.1	0.6	0.3
F.F.	2.8	2.8	2.5	1.3	2.7	-	0	2.7	2.8	0.3	-	0.6	1.0	-	0.8	0.3	0.1	0.1	0.6	0.3
REW	2.8	2.8	2.5	1.3	2.7	-	0	2.7	2.8	0.3	-	0.6	1.0	-	0.8	0.3	0.1	0.1	0.6	0.3

Ref. No.	IC2001																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
STOP	-	0.4	0.1	1.8	1.2	0	0.1	-	0.3	0.3	-	1.8	-	-	1.8	1.8	1.8	-	0.1	-
PLAY	-	0.4	0.1	1.8	1.2	0	0.1	-	0.3	0.3	-	1.8	-	-	1.8	1.8	1.8	-	0.1	-
REC	-	0.4	0.1	1.8	1.2	0	0.1	-	0.3	0.3	-	1.8	-	-	1.8	1.8	1.8	-	0.1	-
F.F.	-	0.4	0.1	1.8	1.2	0	0.1	-	0.3	0.3	-	1.8	-	-	1.8	1.8	1.8	-	0.1	-
REW	-	0.4	0.1	1.8	1.2	0	0.1	-	0.3	0.3	-	1.8	-	-	1.8	1.8	1.8	-	0.1	-

Ref. No.	IC2001																			
MODE	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
STOP	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	1.8	2.9	-	-
PLAY	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	1.8	2.9	-	-
REC	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	1.8	2.9	-	-
F.F.	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	1.8	2.9	-	-
REW	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	1.8	2.9	-	-

Ref. No.	IC2001																			
MODE	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
STOP	-	-	1.7	1.7	1.7	-	2.5	-	-	2.9	0	2.8	1.7	-	1.8	2.5	-	-	-	-
PLAY	-	-	1.7	1.7	1.7	-	2.5	-	-	2.9	0	2.8	1.7	-	1.8	2.5	-	-	-	-
REC	-	-	1.7	1.7	1.7	-	2.5	-	-	2.9	1.8	2.8	1.7	-	1.8	2.5	-	-	-	-
F.F.	-	-	1.7	1.7	1.7	-	2.5	-	-	2.9	0	2.8	1.7	-	1.8	2.5	-	-	-	-
REW	-	-	1.7	1.7	1.7	-	2.5	-	-	2.9	0	2.8	1.7	-	1.8	2.5	-	-	-	-

Ref. No.	IC2001																			
MODE	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220
STOP	-	-	-	-	0.4	0.6	2.8	-	0	2.8	2.5	1.1	-	1.1	-	0	2.8	2.9	-	2.7
PLAY	-	-	-	-	0.4	0.6	2.8	-	0	2.8	2.5	1.1	-	1.1	-	0	2.8	2.9	-	2.7
REC	-	-	-	-	0.4	0.6	2.8	-	0	2.8	2.5	1.1	-	1.1	-	0	2.8	2.9	-	2.7
F.F.	-	-	-	-	0.4	0.6	2.8	-	0	2.8	2.5	1.1	-	1.1	-	0	2.8	2.9	-	2.7
REW	-	-	-	-	0.4	0.6	2.8	-	0	2.8	2.5	1.1	-	1.1	-	0	2.8	2.9	-	2.7

Ref. No.	IC2001																			
MODE	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240
STOP	0	2.7	-	2.9	2.7	-	2.7	0	2.8	-	0	-	0	0	0	0	-	2.9	2.8	2.8
PLAY	0	2.7	-	2.9	2.7	-	2.7	0	2.8	-	0	-	0	0	0	0	-	2.9	0	2.8
REC	0	2.7	-	2.9	2.7	-	2.7	0	2.8	-	0	-	0	0	0	0	-	2.9	2.8	2.8
F.F.	0	2.7	-	2.9	2.7	-	2.7	0	2.8	-	0	-	0	0	0	0	-	2.9	0	2.8
REW	0	2.7	-	2.9	2.7	-	2.7	0	2.8	-	0	-	0	0	0	0	-	2.9	0	2.8

Ref. No.	IC2001																			
MODE	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260
STOP	2.7	0	-	-	-	2.8	0	2.8	-	-	-	2.5	-	0	2.8	0	2.8	0	2.8	2.8
PLAY	2.7	0	-	-	-	2.8	0	2.8	-	-	-	2.5	-	0	2.8	0	2.8	0	2.8	2.8
REC	2.7	0	-	-	-	2.8	0	0	-	-	-	2.5	-	0	2.8	0	2.8	0	2.8	2.8
F.F.	2.7	0	-	-	-	2.8	0	2.8	-	-	-	2.5	-	0	2.8	0	2.8	0	2.8	2.8
REW	2.7	0	-	-	-	2.8	0	2.8	-	-	-	2.5	-	0	2.8	0	2.8	0	2.8	2.8
Ref. No.	IC2001																			
MODE	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280
STOP	2.8	-	1.4	2.8	-	2.8	2.8	1.8	2.1	2.8	2.1	1.4	0	-	0	2.8	2.8	2.8	0.1	-
PLAY	2.8	-	2.1	2.8	-	2.8	2.8	1.8	2.1	2.8	2.1	0.7	2.8	-	0	2.8	2.8	2.8	0.1	-
REC	2.8	-	2.1	2.8	-	2.8	2.8	1.8	2.1	2.8	2.1	2.1	0	-	0	2.8	2.8	2.8	0.1	-
F.F.	2.8	-	2.1	2.8	-	2.8	2.8	1.8	2.1	2.8	2.1	2.1	1.4	-	0	2.8	2.8	2.8	0.1	-
REW	2.8	-	2.1	2.8	-	2.8	2.8	1.8	2.1	2.8	2.1	1.4	1.4	-	0	2.8	2.8	2.8	0.1	-
Ref. No.	IC2001		IC2006									IC2008								
MODE	281		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	
STOP	2.8		2.8	2.8	2.7	2.7	0	0	-	2.9		2.7	2.7	2.7	0	2.7	2.8	2.9	2.9	
PLAY	2.8		0	2.8	2.7	2.7	0	0	-	2.9		2.7	2.7	2.7	0	2.7	2.8	2.9	2.9	
REC	2.8		2.8	2.8	2.7	2.7	0	0	-	2.9		2.7	2.7	2.7	0	2.7	2.8	2.9	2.9	
F.F.	2.8		0	2.8	2.7	2.7	0	0	-	2.9		2.7	2.7	2.7	0	2.7	2.8	2.9	2.9	
REW	2.8		0	2.8	2.7	2.7	0	0	-	2.9		2.7	2.7	2.7	0	2.7	2.8	2.9	2.9	
Ref. No.	IC2009																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	0	0	2.9	2.9	-	1.2	0	0	0	-	-	-	0.1	0.3	0.3	0.3	1.0	1.0
PLAY	0	0	0	0	2.9	2.9	-	1.2	0	0	0	-	-	-	0.1	0.3	0.3	0.3	1.0	1.0
REC	0	0	0	0	2.9	2.9	-	1.2	0	0	0	-	-	-	0.1	0.3	0.3	0.3	1.0	1.0
F.F.	0	0	0	0	2.9	2.9	-	1.2	0	0	0	-	-	-	0.1	0.3	0.3	0.3	1.0	1.0
REW	0	0	0	0	2.9	2.9	-	1.2	0	0	0	-	-	-	0.1	0.3	0.3	0.3	1.0	1.0
Ref. No.	IC2012						IC2014						IC2015					IC2017		
MODE	1	2	3	4	5		1	2	3	4	5		1	2	3	4		1	2	3
STOP	7.9	0	7.9	0	3.4		2.9	0	2.9	0	2.5		0	4.0	2.8	2.4		0	2.8	2.5
PLAY	7.9	0	7.9	0	3.4		2.9	0	2.9	0	2.5		0	4.0	2.8	2.4		0	2.8	2.5
REC	7.9	0	7.9	0	3.4		2.9	0	2.9	0	2.5		0	4.0	2.8	2.4		0	2.8	2.5
F.F.	7.9	0	7.9	0	3.4		2.9	0	2.9	0	2.5		0	4.0	2.8	2.4		0	2.8	2.5
REW	7.9	0	7.9	0	3.4		2.9	0	2.9	0	2.5		0	4.0	2.8	2.4		0	2.8	2.5
Ref. No.	IC2018									IC2019										
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8			
STOP	2.7	0	2.7	0	2.7	0	2.7	2.9		0	-	2.7	0	2.7	0	0	2.9			
PLAY	2.7	0	2.7	0	2.7	0	2.7	2.9		0	-	2.7	0	2.7	0	0	2.9			
REC	2.7	0	2.7	0	2.7	0	2.7	2.9		0	-	2.7	0	2.7	0	0	2.9			
F.F.	2.7	0	2.7	0	2.7	0	2.7	2.9		0	-	2.7	0	2.7	0	0	2.9			
REW	2.7	0	2.7	0	2.7	0	2.7	2.9		0	-	2.7	0	2.7	0	0	2.9			

TRs DC VOLTAGE CHART (SP MODE)

Ref. No.	Q2001				Q2002				Q2003				Q2004				Q2005			
MODE	E	C	B		S	D	G		E	C	B		S	D	G		E	C	B	
STOP	3.0	2.9	2.2		3.4	2.9	2.8		0	0	2.8		3.4	3.2	2.8		2.9	2.8	0	
PLAY	3.0	2.9	2.2		3.4	2.9	2.8		0	0	2.4		3.4	3.2	2.8		2.9	2.8	0	
REC	3.0	2.9	2.2		3.4	2.9	2.8		0	0	2.8		3.4	3.2	2.8		2.9	2.8	0	
F.F.	3.0	2.9	2.2		3.4	2.9	2.8		0	0	2.4		3.4	3.2	2.8		2.9	2.8	0	
REW	3.0	2.9	2.2		3.4	2.9	2.8		0	0	2.4		3.4	3.2	2.8		2.9	2.8	0	
Ref. No.	QR2001				QR2002				QR2003				QR2004				QR2005			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
STOP	0	2.9	0		2.9	2.8	0		0	1.7	0		0	0	1.7		2.9	2.8	0	
PLAY	0	2.9	0		2.9	2.8	0		0	1.7	0		0	0	1.7		2.9	2.8	0	
REC	0	2.9	0		2.9	2.8	0		0	1.7	0		0	0	1.7		2.9	2.8	0	
F.F.	0	2.9	0		2.9	2.8	0		0	1.7	0		0	0	1.7		2.9	2.8	0	
REW	0	2.9	0		2.9	2.8	0		0	1.7	0		0	0	1.7		2.9	2.8	0	
Ref. No.	QR2006							QR2007				QR2008			QR2009			QR2010		
MODE	1	2	3	4	5	6		E	C	B		E	C	B	E	C	B	E	C	B
STOP	2.9	2.8	0	2.9	2.8	0		3.2	3.2	0		0	0	2.8	2.8	2.8	0	0	0	2.8
PLAY	2.9	2.8	0	2.9	2.8	0		3.2	3.2	0		0	0	2.8	2.8	2.8	0	0	0	2.8
REC	2.9	2.8	2.8	2.9	0	0		3.2	3.2	0		0	0	2.8	2.8	2.8	0	0	0	2.8
F.F.	2.9	2.8	0	2.9	2.8	0		3.2	3.2	0		0	0	2.8	2.8	2.8	0	0	0	2.8
REW	2.9	2.8	0	2.9	2.8	0		3.2	3.2	0		0	0	2.8	2.8	2.8	0	0	0	2.8

12.28.2. CONTROL I/O TABLE

IC2001 : VTR CONTROL MICROCOMPUTER

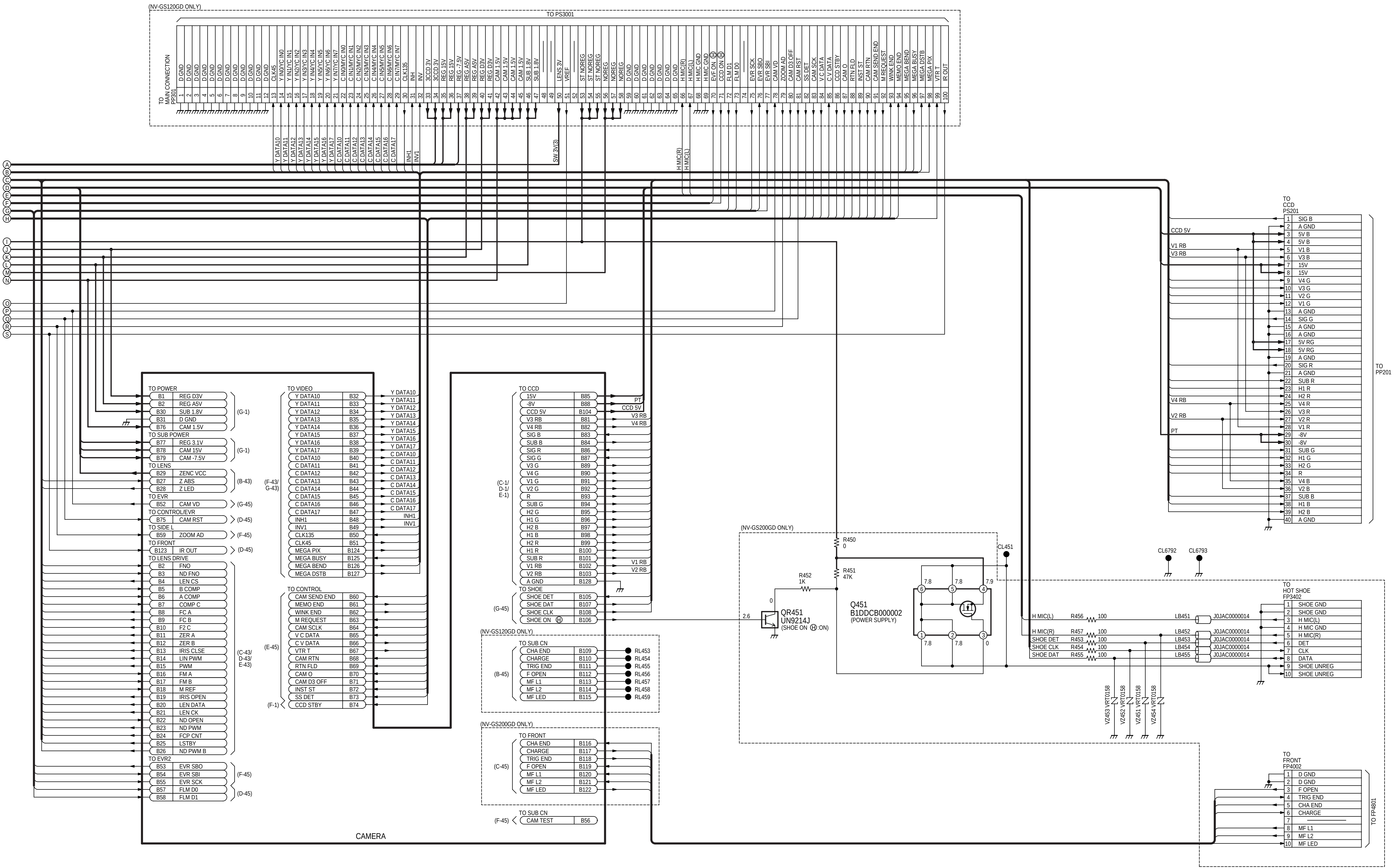
Pin No.	Signal Name	I/O	Explanation
1	NC	-	NC
2	AVCC31	I	Voltage
3	AVSS	-	GND
4	DVCC2	I	Voltage
5	ENDIAN	I	Voltage
6	BOOT	I	BOOT
7	PCTS3	O	PCTS3(EVR2)
8	PCTS0	O	PCTS2(EVR2)
9	INTLV	I	Inter leave Mode
10	SDI DINT	I	SDI DINT(EVR2)
11	PCTS2	O	PCTS2(EVR2)
12	SDAO TPC	O	SDAO(EVR2)
13	BW0	I	Voltage
14	/DBGE	I	/DBGE(EVR2)
15	DCLK	O	DCLK(EVR2)
16	USB INT	I	Voltage
17	PCTS1	O	PCTS1(EVR2)
18	SYS RDY	-	NC
19	DVSS	-	GND
20	TEST1	-	GND
21	BUSMD	I	Voltage
22	/DRESET	I	/DRESET(EVR2)
23	TEST5	-	GND
24	RESET	I	System Reset
25	PLL ON	I	Voltage
26	FVCC2	I	Voltage
27	FVSS	-	GND
28	NMI	I	NMI
29	BW1	I	Voltage
30	DVCC2	I	Voltage
31	DVCC31	I	Voltage
32	NC	-	NC
33	SBA SIF CLK	O	Sub Audio Serial Clock
34	PHOTO2	I	Photo Input
35	NC	-	NC
36	SBA CS	O	Sub Audio Chip Select
37	VTR TEST L	I	VTR Test
38	SBA SIF DTI	I	Sub Audio Serial Deta Input
39	R PLUG L	I	Free Style Remote Control Input Detection
40	SBA SIF DTO	O	Sub Audio Serial Deta Output
41	EXT 5V SW	O	Power Supply Control
42	S PLUG	I	S-Jack Detection
43	DOOR OPEN	I	Door Open Sensor
44	SYNC DET	I	Sync Detection
45	FVCC3	I	Voltage
46	FVSS	-	GND
47	DVSS	-	GND
48	LCD RVS SW	I	LCD Panel Reversal Input
49	SIF P SAVE	O	SIF Power Save
50	BRIGHT ON	I	Backlight Input terminal
51	LCD OPEN SW	I	LCD Panel Open Input
52	AV PLUG	I	AV Jack Detection
53	USB DET	I	USB Cable Connection detection
54	BL BRIGHT Ⓗ	O	EVF Backright Output On:H
55	ARB	-	NC
56	SIF CS	O	SIF Serial CS
57	USB DP BIAS	O	Bias Addition Function
58	XRST	O	System Reset
59	NC	-	NC
60	SH COM TRG	I	Communication Start Signal
61	EVF HL	I	EVF Backlight Birth Determination
62	INPUT SEL	O	S/AV Input terminal Change
63	SHM BOOT REQ	O	ROM Data Download
64	AM SEND END	O	AM SEND END
65	NC	-	NC
66	NC	-	NC
67	MEMO END	I	Memory End
68	HOST REQ	I	Outside Camera Port Layout
69	EVF ON Ⓗ	O	EVF Power Control
70	DVCC32	I	Voltage
71	NC	-	NC
72	NC	-	NC
73	HOST ACK	O	Outside Camera Port Layout
74	NC	-	NC
75	VTR T	O	Communication Microcomputer Request
76	LCD CS	O	LCD Monitor IC CS
77	NC	-	NC
78	NC	-	NC
79	S PHOTO SW2	O	S-Sensor Output
80	T PHOTO SW1	O	T-Sensor Output
81	MIC CLK	O	MIC Communication
82	MIC DATA	I/O	MIC Communication
83	DVSS	-	GND
84	REMOCON	I	IR Remote control In
85	S PHOTO SW1	O	S-Sensor Output
86	PS Ⓛ	O	Power Save Terminal Control (Standby: L)
87	T PHOTO SW2	O	T-Sensor Output
88	CAM D3 OFF	O	Camera Power control
89	SS DET	O	Start/Stop Detect
90	QUIC ST	O	Quick Start
91	CAM0	O	VTR Data
92	NC	-	NC
93	LCD SCK	O	LCD Monitor Communication
94	ERF CLK	O	E2PROM/RTC Communication
95	ERF DO	O	E2PROM/RTC Communication
96	ERF DI	I	E2PROM/RTC Communication
97	CAM RST	O	Camera Reset
98	LCD DI	I	LCD Monitor Communication
99	SH COM CLK	O	MPEG Communication Serial Data Clock
100	DVCC2	I	Voltage
101	DBCC32	I	Voltage
102	LCD DO	O	LCD Monitor Communication
103	PC RST	I	RS232C Reset
104	SH COM DI	O	MPEG Serial Data Output
105	232C RXD	I	UART1
106	232C TXD	O	UART0
107	SH COM DO	I	Serial Data Input
108	CPU VCC SW	O	Microcomputer Power Supply Change
109	V C DATA	O	VTR Serial Data Output
110	WINC END	I	WINC END
111	C V DATA	I	VTR Serial Data Input
112	MIC ON	O	MICPower Supply:L
113	REC REV	I	REC REV
114	RTC CS	O	clock CS
115	SNS LED	O	LED Illumination:H
116	CAM SCK	O	VTR Serial Clock
117	DVSS	-	GND
118	OSD SCK	O	OSD Communication Serial Clock
119	OSD SCK DO	O	OSD Communication Serial Data
120	SH SLEEP	I	SLEEPCondition determination
121	SS SW	I	Start/Stop Key Input
122	POWER ON	O	Power On:H

Pin No.	Signal Name	I/O	Explanation
123	CAM RTN	O	Camera Microcomputer Communication
124	RTN FLD	O	Camera Microcomputer Field Signal
125	MEGA REQ	O	Mega Pixel Request
126	RST PUP	-	GND
127	E2 PROTECT	O	FLASH ROM CE
128	FLASH WP	O	FLASH ROM WP
129	DVCC32	I	Voltage
130	A3	I	Address Data
131	NC	-	NC
132	A8	I	Address Data
133	A7	I	Address Data
134	A0	-	NC
135	A2	I	Address Data
136	A12	I	Address Data
137	A11	I	Address Data
138	A6	I	Address Data
139	A15	I	Address Data
140	A10	I	Address Data
141	DVSS	-	GND
142	A14	I	Address Data
143	A5	I	Address Data
144	DVCC33	I	Voltage
145	A1	I	Address Data
146	MODE14	-	GND
147	A13	-	Address Data
148	A16	-	NC
149	A4	I	Address Data
150	A9	I	Address Data
151	A18	-	NC
152	PHOTO SW	I	Photo Key Input
153	TEST4	-	GND
154	D(2)	I/O	Data Bus
155	STNDBY SW	I	Standby SW
156	CARD DET	I	SD Card Exists and No
157	SD PROTECT	I	SD Card Protect
158	TEST3	-	GND
159	D(0)	I/O	Data Bus
160	DVSS	-	GND
161	NC	-	NC
162	D(1)	I/O	Data Bus
163	D(6)	I/O	Data Bus
164	D(3)	I/O	Data Bus
165	D(5)	I/O	Data Bus
166	D(4)	I/O	Data Bus
167	FVSS	-	GND
168	FVCC2	I	Voltage
169	D(9)	I/O	Data Bus
170	TEST0	-	GND
171	D(8)	I/O	Data Bus
172	D(7)	I/O	Data Bus
173	D(10)	I/O	Data Bus
174	D(13)	I/O	Data Bus
175	D(11)	I/O	Data Bus
176	D(12)	I/O	Data Bus
177	DVCC33	I	Voltage
178	EVF BL	O	EVF Backright On:H
179	D(15)	I/O	Data Bus
180	SH MFI MD	O	MF ID Bas Mode Selection
181	DVSS	-	GND
182	XDUO CS	O	DUO Chip Select
183	XWEH	O	X Write Strobe H

Pin No.	Signal Name	I/O	Explanation
184	XREADY	I	X Ready Strobe
185	XRE	O	X Read Strobe
186	FVSS	-	GND
187	FVCC2	I	Voltage
188	D(14)	I/O	Data Bus
189	NC	-	NC
190	CCD STBY	O	CCD Standby
191	CCD ON Ⓗ	O	CCD Power ON/OFF
192	LCD ON Ⓗ	O	LCD Power ON/OFF
193	XWEL	O	X Write Strobe L
194	TEST2	-	GND
195	DVCC33	I	Voltage
196	DVCC2	I	Voltage
197	NC	-	NC
198	X RAM CS	-	NC
199	NC	-	NC
200	XTI	-	NC
201	CVCCH	-	GND
202	CAP1	-	GND
203	CAP2	-	GND
204	XT2	-	NC
205	TDO	O	Test Data Output
206	TDI	I	Test Data Input
207	TMS	I	JTAG Mode
208	TRST	-	NC
209	TCK	I	JTAG Clock
210	DVCC34	I	Voltage
211	CVCC2	I	Voltage
212	XI	I	Crystal 13.5MHz
213	CVSS	-	GND
214	X2	O	Crystal 13.5MHz
215	NC	-	NC
216	CASS DOWN	I	Cassette Down
217	LCD BL	O	LCD Backright On:H
218	SHMFINT	I	MPEG IC Interruption
219	NC	-	NC
220	DUO INT3	I	Video IC Interruption 3
221	DUO INT2	I	Video IC Interruption 2
222	DUO INT1	I	Video IC Interruption 1
223	DVSS	-	GND
224	HP DET Ⓛ	I	Headphone Judgement
225	TIMER INT	I	Clock one minute Interruption
226	NC	-	NC
227	DUO INTO	I	Video IC Interruption 0
228	EXT Ⓗ	O	Analogue Input:H
229	CR POWER	I	AWP Power supply control
230	NC	-	NC
231	EJECT SW	I	EJECT SW
232	NC	-	NC
233	ACCESS LED	O	Access LED
234	OSD CS	O	OSD IC CS
235	POWER SW	I	Power SW In
236	OSD RST	O	OSD IC Reset
237	NC	-	NC
238	SH RST	O	Reset Signal
239	EEP CS	O	E2 PROM CS
240	DVCC34	I	Voltage
241	FLASH CS	O	FLASH CE
242	SH WAKEUP	O	Rising Demand Signal
243	NC	-	NC
244	NC	-	NC

Pin No.	Signal Name	I/O	Explanation
245	NC	-	NC
246	STNDBY LED	O	STNDBY LED
247	POWER LED	O	POWER LED
248	TALLY LED	O	TALLY LED
249	NC	-	NC
250	DVSS	-	GND
251	NC	-	NC
252	DVCC2	I	Voltage
253	AVSS	-	GND
254	LOAD LOCK DET	I	Finger scissors detection
255	AVCC32	I	Voltage
256	T PHOTO	I	T Photo Input
257	BATT D	I	D Terminal input
258	S PHOTO	I	S Photo In
259	MIC AD1	I	Contact ID Input
260	MIC AD2	I	Contact ID Input
261	MIC AD3	I	Contact ID Input
262	AVSS	-	GND
263	VCR KEY 1	I	Analogue key Input

Pin No.	Signal Name	I/O	Explanation
264	CAM KEY 1	I	Analogue key Input
265	NC	-	GND
266	BLC	I	BLC
267	REGD3V DET	I	Shutdown Detect
268	BATT REF	I	Battery Input
269	VCR KEY 3	I	Analogue key Input
270	BATTERY	I	Battery Voltage Input
271	VCR KEY 5	I	Analogue key Input
272	VCR KEY 2	I	Analogue key Input
273	EXT MIC	I	Outside microphone
274	Y LEVEL	O	Y LEVEL
275	NC	I	Operational amplifier Output
276	DEW	I	DEW Sensor
277	AWP DET	I	AWP Connect Detect
278	UNI REMO	I	Free Style Remote Control Input
279	WIDE DET	I	Wide Discrimination
280	VREFL	-	GND
281	VREFH	I	Voltage


(NV-GS120GD ONLY)
TO PS3001
TO MAIN CONNECTION PP301
D GND
CLK45
Y IN0/YC IN0
Y IN1/YC IN1
Y IN2/YC IN2
Y IN3/YC IN3
Y IN4/YC IN4
Y IN5/YC IN5
Y IN6/YC IN6
Y IN7/YC IN7
C IN0/MYC IN0
C IN1/MYC IN1
C IN2/MYC IN2
C IN3/MYC IN3
C IN4/MYC IN4
C IN5/MYC IN5
C IN6/MYC IN6
C IN7/MYC IN7
CLK135
INH
INV
3CCD 3V
REG 15V
REG -7.5V
REG A5V
REG D3V
CAM 1.5V
SUB 1.8V
LENS 3V
VREF
ST NOREG
NOREG
H MIC(R)
H MIC(L)
H MIC GND
EVF ON Ⓗ
CCD ON Ⓗ
FLM D1
FLM D0
EVR SCK
EVR SBO
EVR SBI
CAM VD
ZOOM AD
CAM D3 OFF
CAM RST
SS DET
CAM SCK
C V DATA
CCD STBY
CAM O
RTN FLD
INST ST
CAM RTN
CAM SEND END
M REQUEST
WINK END
MEMO END
MEGA BEND
MEGA BUSY
MEGA DSTB
MEGA PIX
VTR T
IR OUT
Y DATA10
Y DATA11
Y DATA12
Y DATA13
Y DATA14
Y DATA15
Y DATA16
Y DATA17
C DATA10
C DATA11
C DATA12
C DATA13
C DATA14
C DATA15
C DATA16
C DATA17
INH1
INV1
SW 3V(3)
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
TO POWER
B1 REG D3V
B2 REG A5V
B30 SUB 1.8V
B31 D GND
B76 CAM 1.5V
(G-1)
TO SUB POWER
B77 REG 3.1V
B78 CAM 15V
B79 CAM -7.5V
TO LENS
B29 ZENC VCC
B27 Z ABS
B28 Z LED
(B-43)
TO EVR
B52 CAM VD
(G-45)
TO CONTROL/EVR
B75 CAM RST
(D-45)
TO SIDE L
B59 ZOOM AD
(F-45)
TO FRONT
B123 IR OUT
(D-45)
TO LENS DRIVE
B2 FNO
B3 ND FNO
B4 LEN CS
B5 B COMP
B6 A COMP
B7 COMP C
B8 FC A
B9 FC B
B10 F2 C
B11 ZER A
B12 ZER B
B13 IRIS CLSE
B14 LIN PWM
B15 PWM
B16 FM A
B17 FM B
B18 M REF
B19 IRIS OPEN
B20 LEN DATA
B21 LEN CK
B22 ND OPEN
B23 ND PWM
B24 FCP CNT
B25 LSTBY
B26 ND PWM B
(C-43/ D-43/ E-43)
TO EVR2
B53 EVR SBO
B54 EVR SBI
B55 EVR SCK
B57 FLM D0
B58 FLM D1
(F-45)
(D-45)
TO VIDEO
Y DATA10 B32
Y DATA11 B33
Y DATA12 B34
Y DATA13 B35
Y DATA14 B36
Y DATA15 B37
Y DATA16 B38
Y DATA17 B39
C DATA10 B40
C DATA11 B41
C DATA12 B42
C DATA13 B43
C DATA14 B44
C DATA15 B45
C DATA16 B46
C DATA17 B47
INH1 B48
INV1 B49
CLK135 B50
CLK45 B51
MEGA PIX B124
MEGA BUSY B125
MEGA BEND B126
MEGA DSTB B127
(F-43/ G-43)
TO CONTROL
CAM SEND END B60
MEMO END B61
WINK END B62
M REQUEST B63
CAM SCLK B64
V C DATA B65
C V DATA B66
VTR T B67
CAM RTN B68
RTN FLD B69
CAM O B70
CAM D3 OFF B71
INST ST B72
SS DET B73
CCD STBY B74
(E-45)
(F-1)
TO CCD
15V B85
-8V B88
CCD 5V B104
V3 RB B81
V4 RB B82
SIG B B83
SUB B B84
SIG R B86
SIG G B87
V3 G B89
V4 G B90
V1 G B91
V2 G B92
R B93
SUB G B94
H2 G B95
H1 G B96
H2 B B97
H1 B B98
H2 R B99
H1 R B100
SUB R B101
V1 RB B102
V2 RB B103
A GND B128
(C-1/ D-1/ E-1)
PT
CCD 5V
V3 RB
V4 RB
V1 RB
V2 RB
TO SHOE
SHOE DET B105
SHOE DAT B107
SHOE CLK B108
SHOE ON Ⓗ B106
(G-45)
(NV-GS120GD ONLY)
TO SUB CN
CHA END B109
CHARGE B110
TRIG END B111
F OPEN B112
MF L1 B113
MF L2 B114
MF LED B115
(B-45)
RL453
RL454
RL455
RL456
RL457
RL458
RL459
(NV-GS120GD ONLY)
TO FRONT
CHA END B116
CHARGE B117
TRIG END B118
F OPEN B119
MF L1 B120
MF L2 B121
MF LED B122
(C-45)
TO SUB CN
CAM TEST B56
(F-45)
CAMERA
(NV-GS200GD ONLY)
R450 0
R451 47K
R452 1K
QR451 UN9214J (SHOE ON Ⓗ:ON)
2.6
0
Q451 B1DDCB000002 (POWER SUPPLY)
7.8
7.8
7.9
7.8
7.8
0
CL451
CL6792
CL6793
H MIC(L) R456 100 LB451 J0JAC0000014
H MIC(R) R457 100 LB452 J0JAC0000014
SHOE DET R453 100 LB453 J0JAC0000014
SHOE CLK R454 100 LB454 J0JAC0000014
SHOE DAT R455 100 LB455 J0JAC0000014
VZ453 VRT0158
VZ452 VRT0158
VZ451 VRT0158
VZ454 VRT0158
TO CCD PS201
1 SIG B
2 A GND
3 5V B
4 5V B
5 V1 B
6 V3 B
7 15V
8 15V
9 V4 G
10 V3 G
11 V2 G
12 V1 G
13 A GND
14 SIG G
15 A GND
16 A GND
17 5V RG
18 5V RG
19 A GND
20 SIG R
21 A GND
22 SUB R
23 H1 R
24 H2 R
25 V4 R
26 V3 R
27 V2 R
28 V1 R
29 -8V
30 -8V
31 SUB G
32 H1 G
33 H2 G
34 R
35 V4 B
36 V2 B
37 SUB B
38 H1 B
39 H2 B
40 A GND
TO PP201
CCD 5V
V1 RB
V3 RB
V4 RB
V2 RB
PT
TO HOT SHOE FP3402
1 SHOE GND
2 SHOE GND
3 H MIC(L)
4 H MIC GND
5 H MIC(R)
6 DET
7 CLK
8 DATA
9 SHOE UNREG
10 SHOE UNREG
TO FRONT FP4002
1 D GND
2 D GND
3 F OPEN
4 TRIG END
5 CHA END
6 CHARGE
7
8 MF L1
9 MF L2
10 MF LED
TO FP4801

NV-GS200GD,GS120GD
SUB (SUB CONNECTION)
SCHEMATIC DIAGRAM

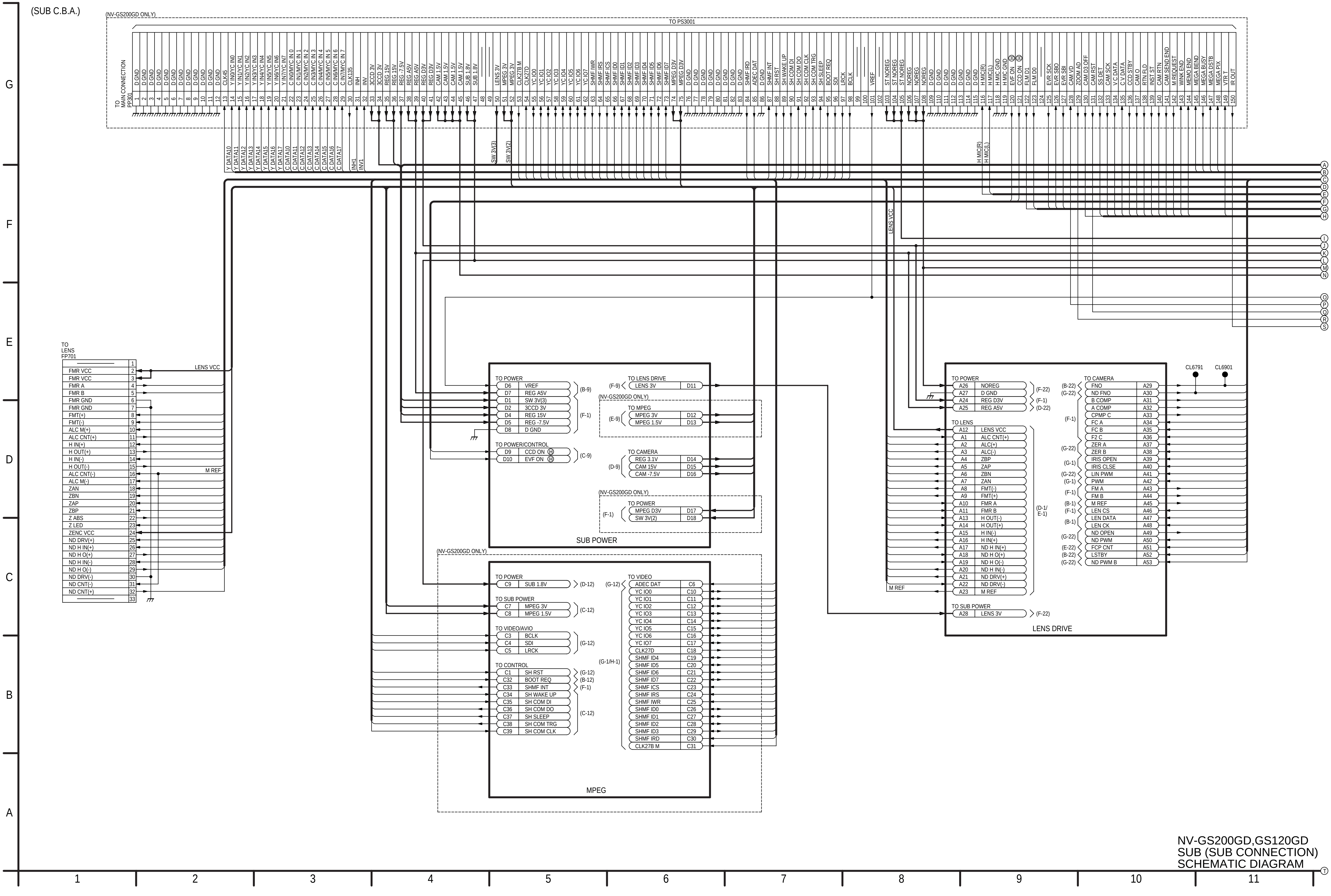
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.(SHOE:ON)

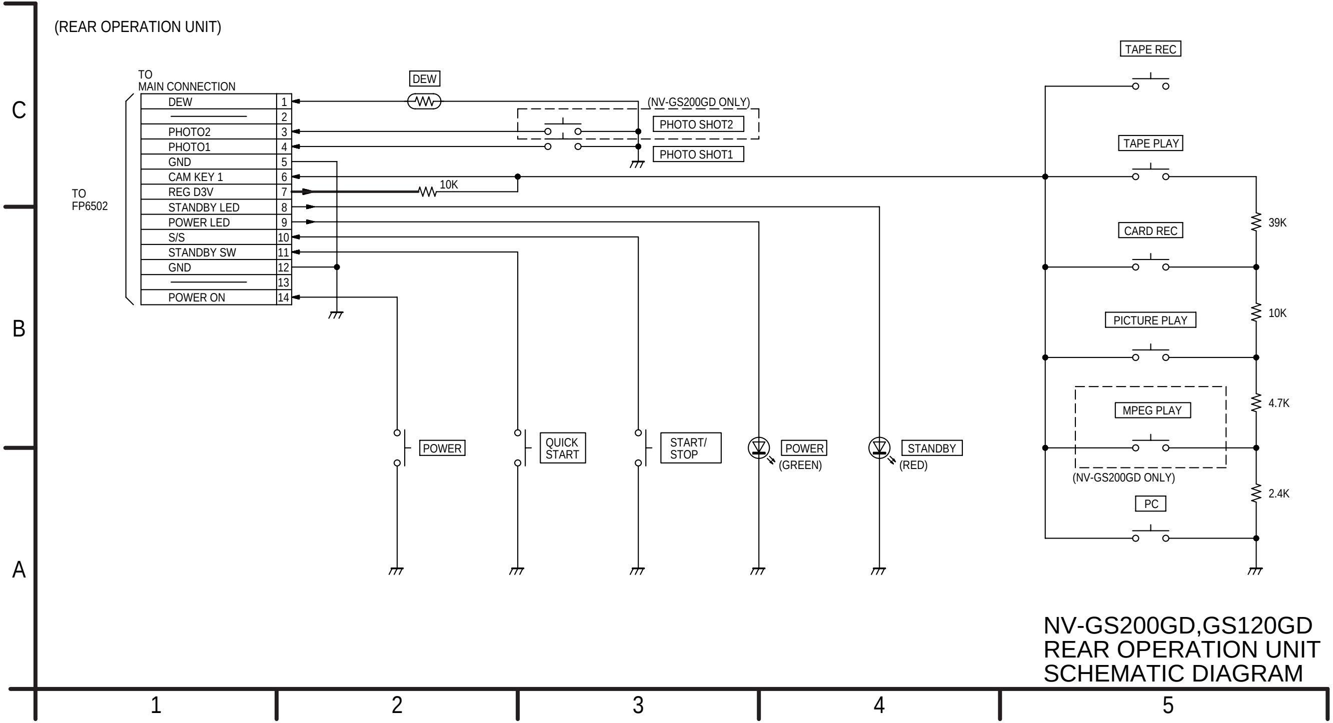
NV-GS200GD,GS120GD
SUB (SUB CONNECTION) SCHEMATIC DIAGRAM

T

12 13 14 15 16 17 18 19 20 21 22


(SUB C.B.A.)
(NV-GS200GD ONLY)
TO PS3001
TO MAIN CONNECTION PP301
1 D GND
2 D GND
3 D GND
4 D GND
5 D GND
6 D GND
7 D GND
8 D GND
9 D GND
10 D GND
11 D GND
12 D GND
13 CLK45
14 Y IN0/YC IN0
15 Y IN1/YC IN1
16 Y IN2/YC IN2
17 Y IN3/YC IN3
18 Y IN4/YC IN4
19 Y IN5/YC IN5
20 Y IN6/YC IN6
21 Y IN7/YC IN7
22 C IN0/MYC IN 0
23 C IN1/MYC IN 1
24 C IN2/MYC IN 2
25 C IN3/MYC IN 3
26 C IN4/MYC IN 4
27 C IN5/MYC IN 5
28 C IN6/MYC IN 6
29 C IN7/MYC IN 7
30 CLK135
31 INH
32 INV
33 3CCD 3V
34 3CCD 3V
35 REG 15V
36 REG 15V
37 REG -7.5V
38 REG A5V
39 REG A5V
40 REG D3V
41 REG D3V
42 CAM 1.5V
43 CAM 1.5V
44 CAM 1.5V
45 CAM 1.5V
46 SUB 1.8V
47 SUB 1.8V
48
49
50 LENS 3V
51 MPEG 3V
52 MPEG 3V
53 CLK27B M
54 CLK27D
55 YC IO0
56 YC IO1
57 YC IO2
58 YC IO3
59 YC IO4
60 YC IO5
61 YC IO6
62 YC IO7
63 SHMF IWR
64 SHMF IRS
65 SHMF ICS
66 SHMF ID0
67 SHMF ID1
68 SHMF ID2
69 SHMF ID3
70 SHMF ID4
71 SHMF ID5
72 SHMF ID6
73 SHMF ID7
74 MPEG D3V
75 MPEG D3V
76 D GND
77 D GND
78 D GND
79 D GND
80 D GND
81 D GND
82 D GND
83 D GND
84 SHMF IRD
85 ADEC DAT
86 D GND
87 SHMF INT
88 SH RST
89 SH WAKE UP
90 SH COM DI
91 SH COM DO
92 SH COM CLK
93 SH COM TRG
94 SH SLEEP
95 BOOT REQ
96 SDI
97 LRCK
98 BCLK
99
100
101 VREF
102
103 ST NOREG
104 ST NOREG
105 ST NOREG
106 NOREG
107 NOREG
108 NOREG
109 D GND
110 D GND
111 D GND
112 D GND
113 D GND
114 D GND
115 D GND
116 H MIC(R)
117 H MIC(L)
118 H MIC GND
119 H MIC GND
120 EVF ON Ⓗ
121 CCD ON Ⓗ
122 FLM D1
123 FLM D0
124
125 EVR SCK
126 EVR SBO
127 EVR SBI
128 CAM VD
129 ZOOM AD
130 CAM D3 OFF
131 CAM RST
132 SS DET
133 CAM SCK
134 V C DATA
135 C V DATA
136 CCD STBY
137 CAM O
138 RTN FLD
139 INST ST
140 CAM RTN
141 CAM SEND END
142 M REQUEST
143 WINK END
144 MEMO END
145 MEGA BEND
146 MEGA BUSY
147 MEGA DSTB
148 MEGA PIX
149 VTR T
150 IR OUT
Y DATA10
Y DATA11
Y DATA12
Y DATA13
Y DATA14
Y DATA15
Y DATA16
Y DATA17
C DATA10
C DATA11
C DATA12
C DATA13
C DATA14
C DATA15
C DATA16
C DATA17
INH1
INV1
SW 3V(3)
SW 3V(2)
H MIC(R)
H MIC(L)
LENS VCC
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
TO LENS FP701
1
2 FMR VCC
3 FMR VCC
4 FMR A
5 FMR B
6 FMR GND
7 FMR GND
8 FMT(+)
9 FMT(-)
10 ALC M(+)
11 ALC CNT(+)
12 H IN(+)
13 H OUT(+)
14 H IN(-)
15 H OUT(-)
16 ALC CNT(-)
17 ALC M(-)
18 ZAN
19 ZBN
20 ZAP
21 ZBP
22 Z ABS
23 Z LED
24 ZENC VCC
25 ND DRV(+)
26 ND H IN(+)
27 ND H O(+)
28 ND H IN(-)
29 ND H O(-)
30 ND DRV(-)
31 ND CNT(-)
32 ND CNT(+)
33
LENS VCC
M REF
TO POWER
D6 VREF
D7 REG A5V
D1 SW 3V(3)
D2 3CCD 3V
D4 REG 15V
D5 REG -7.5V
D8 D GND
(B-9)
(F-1)
TO POWER/CONTROL
D9 CCD ON Ⓗ
D10 EVF ON Ⓗ
(C-9)
TO LENS DRIVE
(F-9)
LENS 3V D11
(NV-GS200GD ONLY)
TO MPEG
(E-9)
MPEG 3V D12
MPEG 1.5V D13
TO CAMERA
(D-9)
REG 3.1V D14
CAM 15V D15
CAM -7.5V D16
(NV-GS200GD ONLY)
TO POWER
(F-1)
MPEG D3V D17
SW 3V(2) D18
SUB POWER
(NV-GS200GD ONLY)
TO POWER
C9 SUB 1.8V
(D-12)
TO SUB POWER
C7 MPEG 3V
C8 MPEG 1.5V
(C-12)
TO VIDEO/AVIO
C3 BCLK
C4 SDI
C5 LRCK
(G-12)
TO CONTROL
C1 SH RST
C32 BOOT REQ
C33 SHMF INT
C34 SH WAKE UP
C35 SH COM DI
C36 SH COM DO
C37 SH SLEEP
C38 SH COM TRG
C39 SH COM CLK
(G-12)
(B-12)
(F-1)
(C-12)
TO VIDEO
(G-12)
ADEC DAT C6
YC IO0 C10
YC IO1 C11
YC IO2 C12
YC IO3 C13
YC IO4 C14
YC IO5 C15
YC IO6 C16
YC IO7 C17
CLK27D C18
SHMF ID4 C19
SHMF ID5 C20
SHMF ID6 C21
SHMF ID7 C22
SHMF ICS C23
SHMF IRS C24
SHMF IWR C25
SHMF ID0 C26
SHMF ID1 C27
SHMF ID2 C28
SHMF ID3 C29
SHMF IRD C30
CLK27B M C31
(G-1/H-1)
MPEG
TO POWER
A26 NOREG
A27 D GND
A24 REG D3V
A25 REG A5V
(F-22)
(F-1)
(D-22)
TO LENS
A12 LENS VCC
A1 ALC CNT(+)
A2 ALC(+)
A3 ALC(-)
A4 ZBP
A5 ZAP
A6 ZBN
A7 ZAN
A8 FMT(-)
A9 FMT(+)
A10 FMR A
A11 FMR B
A13 H OUT(-)
A14 H OUT(+)
A15 H IN(-)
A16 H IN(+)
A17 ND H IN(+)
A18 ND H O(+)
A19 ND H O(-)
A20 ND H IN(-)
A21 ND DRV(+)
A22 ND DRV(-)
A23 M REF
(D-1/ E-1)
M REF
TO SUB POWER
A28 LENS 3V
(F-22)
TO CAMERA
(B-22) FNO A29
(G-22) ND FNO A30
B COMP A31
A COMP A32
CPMP C A33
(F-1)
FC A A34
FC B A35
F2 C A36
(G-22)
ZER A A37
ZER B A38
(G-1)
IRIS OPEN A39
IRIS CLSE A40
(G-22) LIN PWM A41
(G-1) PWM A42
(F-1)
FM A A43
FM B A44
(B-1) M REF A45
(F-1) LEN CS A46
(B-1)
LEN DATA A47
LEN CK A48
(G-22)
ND OPEN A49
ND PWM A50
(E-22) FCP CNT A51
(B-22) LSTBY A52
(G-22) ND PWM B A53
CL6791
CL6901
LENS DRIVE
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11

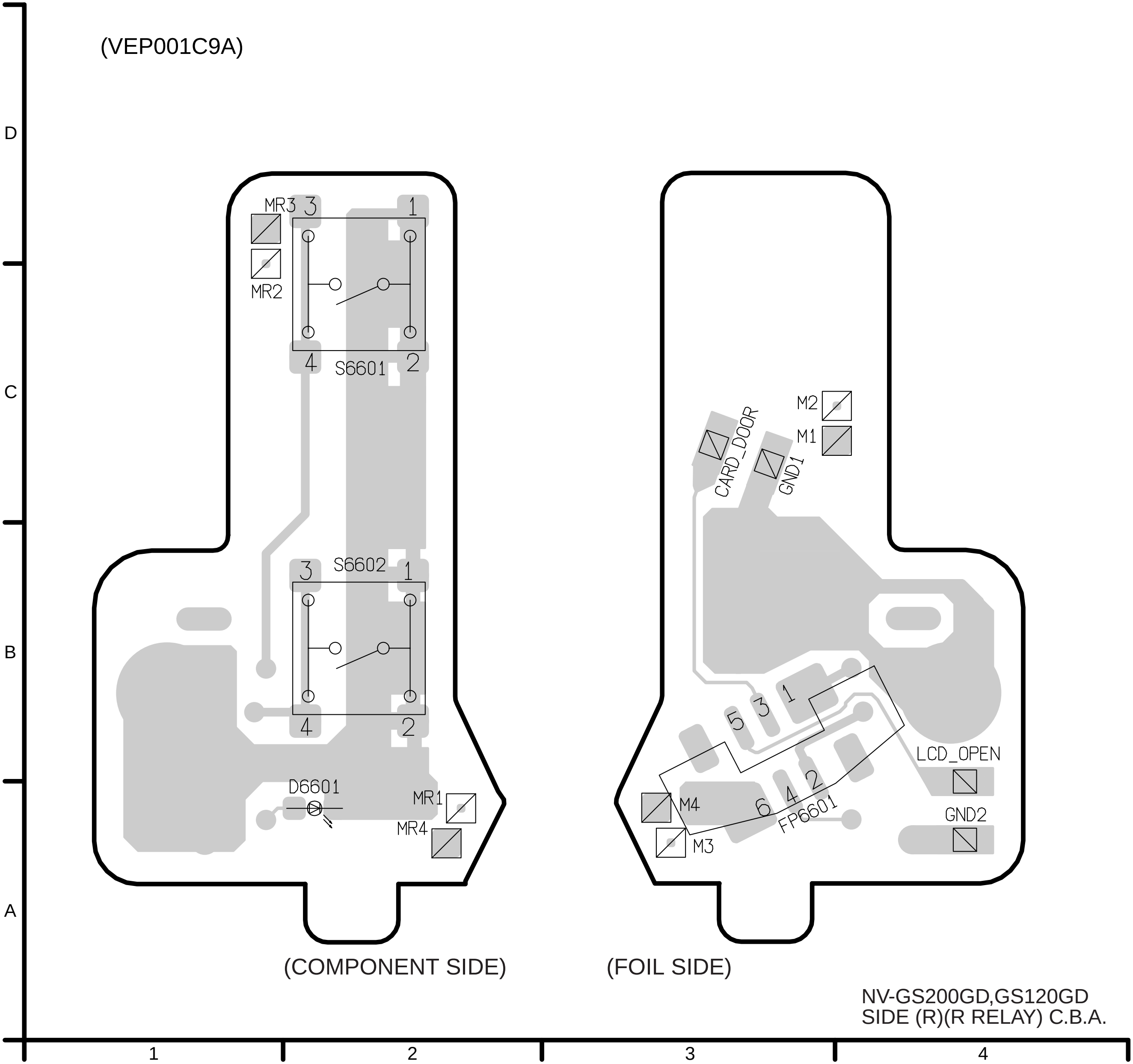
NV-GS200GD,GS120GD
SUB (SUB CONNECTION)
SCHEMATIC DIAGRAM



C
B
A
1
2
3
4
5
(REAR OPERATION UNIT)
TO
MAIN CONNECTION
TO
FP6502
DEW
PHOTO2
PHOTO1
GND
CAM KEY 1
REG D3V
STANDBY LED
POWER LED
S/S
STANDBY SW
GND
POWER ON
1
2
3
4
5
6
7
8
9
10
11
12
13
14
DEW
10K
(NV-GS200GD ONLY)
PHOTO SHOT2
PHOTO SHOT1
POWER
QUICK
START
START/
STOP
POWER
(GREEN)
STANDBY
(RED)
TAPE REC
TAPE PLAY
CARD REC
PICTURE PLAY
MPEG PLAY
(NV-GS200GD ONLY)
PC
39K
10K
4.7K
2.4K

NV-GS200GD,GS120GD
REAR OPERATION UNIT
SCHEMATIC DIAGRAM

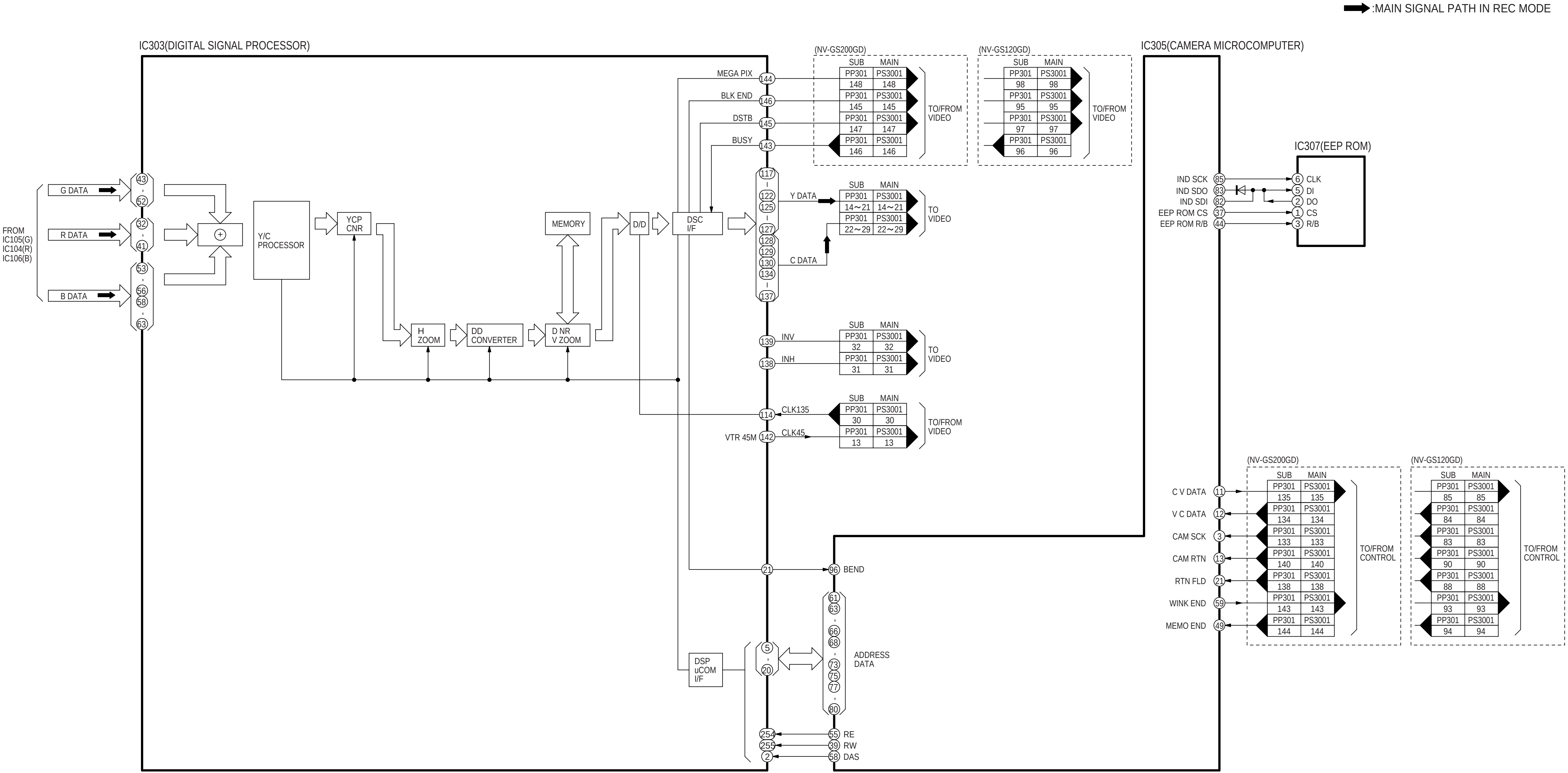
(VEP001C9A)


D
C
B
A
1
2
3
4
MR3
MR2
3
1
4
2
S6601
S6602
3
1
4
2
D6601
MR1
MR4
M2
M1
CARD_DOOR
GND1
1
3
5
2
4
6
FP6601
LCD_OPEN
GND2
M4
M3

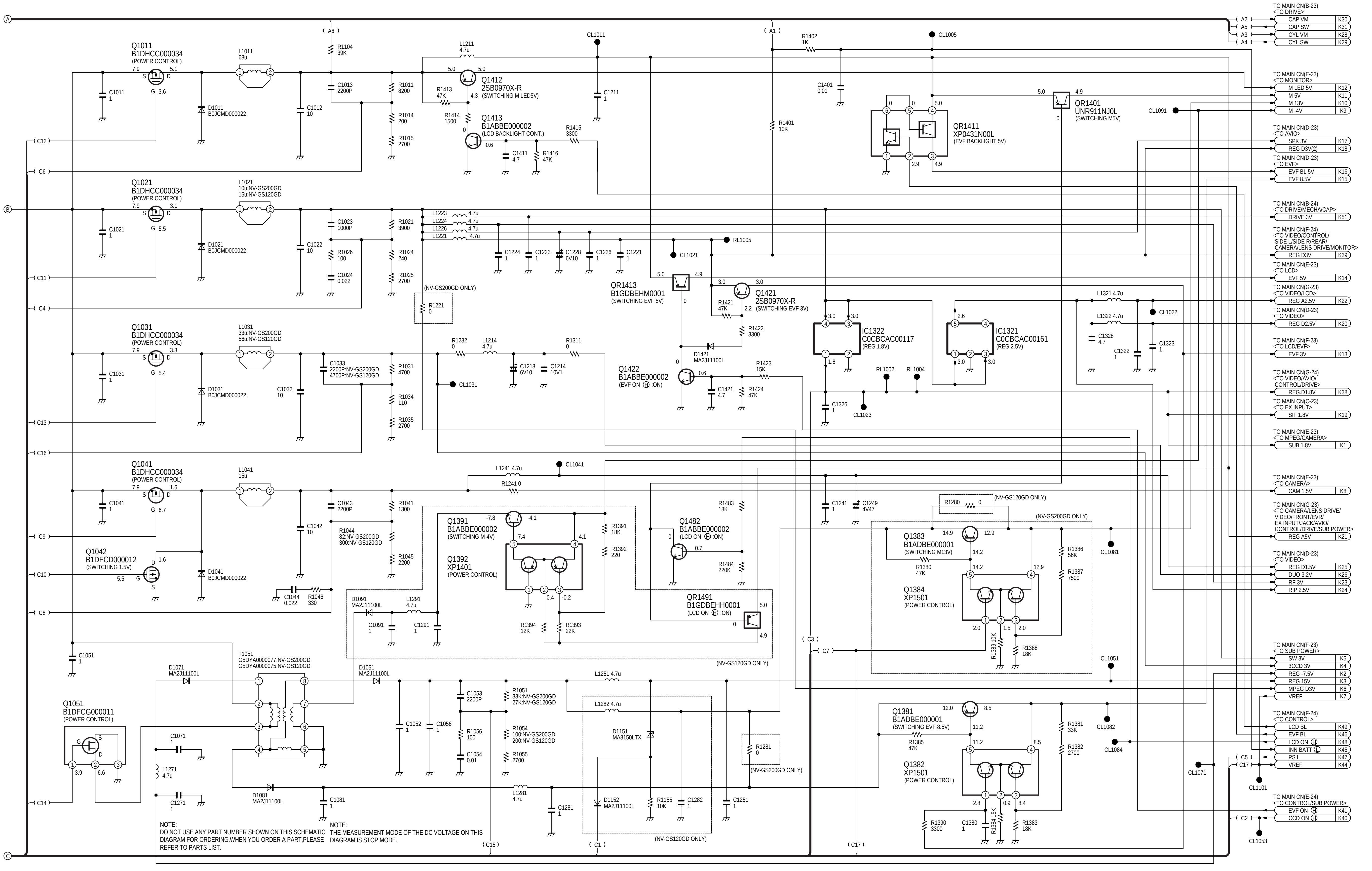
(COMPONENT SIDE)

(FOIL SIDE)

NV-GS200GD,GS120GD
SIDE (R)(R RELAY) C.B.A.


:MAIN SIGNAL PATH IN REC MODE
IC303(DIGITAL SIGNAL PROCESSOR)
IC305(CAMERA MICROCOMPUTER)
IC307(EEP ROM)
FROM
IC105(G)
IC104(R)
IC106(B)
G DATA
R DATA
B DATA
43
52
32
41
53
56
58
63
+
Y/C
PROCESSOR
YCP
CNR
H
ZOOM
DD
CONVERTER
MEMORY
D NR
V ZOOM
D/D
DSC
I/F
DSP
uCOM
I/F
MEGA PIX
BLK END
DSTB
BUSY
144
146
145
143
117
122
125
127
128
129
130
134
137
Y DATA
C DATA
139
138
INV
INH
114
142
CLK135
CLK45
VTR 45M
21
96
BEND
61
63
66
68
73
75
77
80
5
20
ADDRESS
DATA
254
255
2
55
39
58
RE
RW
DAS
(NV-GS200GD)
(NV-GS120GD)
SUB
MAIN
PP301
PS3001
148
145
147
146
98
95
97
96
14～21
22～29
32
31
30
13
TO/FROM
VIDEO
TO
VIDEO
IND SCK
IND SDO
IND SDI
EEP ROM CS
EEP ROM R/B
85
83
82
37
44
6
5
2
1
3
CLK
DI
DO
CS
R/B
C V DATA
V C DATA
CAM SCK
CAM RTN
RTN FLD
WINK END
MEMO END
11
12
3
13
21
59
49
135
134
133
140
138
143
144
85
84
83
90
88
93
94
TO/FROM
CONTROL

NV-GS200GD,GS120GD
CAMERA 2 BLOCK DIAGRAM
(PROCESS BLOCK DIAGRAM)

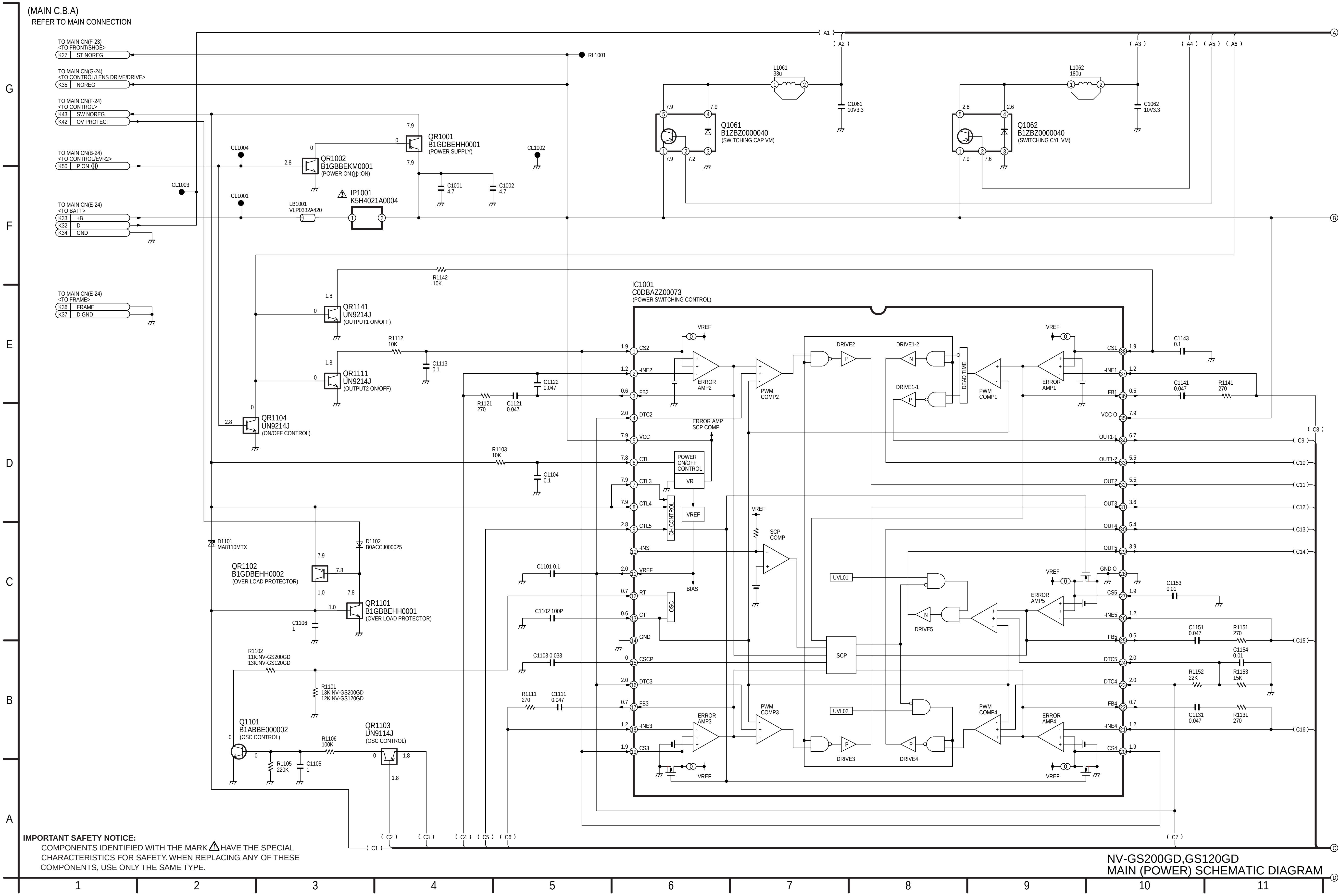

TO MAIN CN(B-23) <TO DRIVE>
A2 CAP VM K30
A5 CAP SW K31
A3 CYL VM K28
A4 CYL SW K29
TO MAIN CN(E-23) <TO MONITOR>
M LED 5V K12
M 5V K11
M 13V K10
M -4V K9
TO MAIN CN(D-23) <TO AVIO>
SPK 3V K17
REG D3V(2) K18
TO MAIN CN(D-23) <TO EVF>
EVF BL 5V K16
EVF 8.5V K15
TO MAIN CN(B-24) <TO DRIVE/MECHA/CAP>
DRIVE 3V K51
TO MAIN CN(F-24) <TO VIDEO/CONTROL/ SIDE L/SIDE R/REAR/ CAMERA/LENS DRIVE/MONITOR>
REG D3V K39
TO MAIN CN(E-23) <TO LCD>
EVF 5V K14
TO MAIN CN(G-23) <TO VIDEO/LCD>
REG A2.5V K22
TO MAIN CN(D-23) <TO VIDEO>
REG D2.5V K20
TO MAIN CN(F-23) <TO LCD/EVF>
EVF 3V K13
TO MAIN CN(G-24) <TO VIDEO/AVIO/ CONTROL/DRIVE>
REG.D1.8V K38
TO MAIN CN(C-23) <TO EX INPUT>
SIF 1.8V K19
TO MAIN CN(E-23) <TO MPEG/CAMERA>
SUB 1.8V K1
TO MAIN CN(E-23) <TO CAMERA>
CAM 1.5V K8
TO MAIN CN(E-23) <TO CAMERA/LENS DRIVE/ VIDEO/FRONT/EVR/ EX INPUT/JACK/AVIO/ CONTROL/DRIVE/SUB POWER>
REG A5V K21
TO MAIN CN(D-23) <TO VIDEO>
REG D1.5V K25
DUO 3.2V K26
RF 3V K23
RIP 2.5V K24
TO MAIN CN(F-23) <TO SUB POWER>
SW 3V K5
3CCD 3V K4
REG -7.5V K2
REG 15V K3
MPEG D3V K6
VREF K7
TO MAIN CN(F-24) <TO CONTROL>
LCD BL K49
EVF BL K46
LCD ON Ⓗ K48
INN BATT Ⓛ K45
PS L K47
VREF K44
TO MAIN CN(E-24) <TO CONTROL/SUB POWER>
EVF ON Ⓗ K41
CCD ON Ⓗ K40
A B C D
A6 A1 C12 C6 C11 C4 C13 C16 C9 C10 C8 C14 C15 C1 C17 C3 C7 C5 C17 C2
Q1011 B1DHCC000034 (POWER CONTROL)
Q1021 B1DHCC000034 (POWER CONTROL)
Q1031 B1DHCC000034 (POWER CONTROL)
Q1041 B1DHCC000034 (POWER CONTROL)
Q1042 B1DFCD000012 (SWITCHING 1.5V)
Q1051 B1DFCG000011 (POWER CONTROL)
L1011 68u
L1021 10u:NV-GS200GD 15u:NV-GS120GD
L1031 33u:NV-GS200GD 56u:NV-GS120GD
L1041 15u
D1011 B0JCMD000022
D1021 B0JCMD000022
D1031 B0JCMD000022
D1041 B0JCMD000022
C1011 1
C1012 10
C1013 2200P
C1021 1
C1022 10
C1023 1000P
C1024 0.022
C1031 1
C1032 10
C1033 2200P:NV-GS200GD 4700P:NV-GS120GD
C1041 1
C1042 10
C1043 2200P
C1044 0.022
C1051 1
R1104 39K
R1011 8200
R1014 200
R1015 2700
R1021 3900
R1026 100
R1024 240
R1025 2700
R1031 4700
R1034 110
R1035 2700
R1041 1300
R1044 82:NV-GS200GD 300:NV-GS120GD
R1045 2200
R1046 330
L1211 4.7u
Q1412 2SB0970X-R (SWITCHING M LED5V)
R1413 47K
R1414 1500
Q1413 B1ABBE000002 (LCD BACKLIGHT CONT.)
R1415 3300
C1411 4.7
R1416 47K
CL1011
C1211 1
R1402 1K
CL1005
C1401 0.01
R1401 10K
QR1411 XP0431N00L (EVF BACKLIGHT 5V)
QR1401 UNR911NJ0L (SWITCHING M5V)
CL1091
L1223 4.7u
L1224 4.7u
L1226 4.7u
L1221 4.7u
C1224 1
C1223 1
C1228 6V10
C1226 1
C1221 1
CL1021
RL1005
(NV-GS200GD ONLY)
R1221 0
QR1413 B1GDBEHM0001 (SWITCHING EVF 5V)
Q1421 2SB0970X-R (SWITCHING EVF 3V)
R1421 47K
R1422 3300
D1421 MA2J11100L
Q1422 B1ABBE000002 (EVF ON Ⓗ :ON)
R1423 15K
C1421 4.7
R1424 47K
IC1322 C0CBCAC00117 (REG.1.8V)
IC1321 C0CBCAC00161 (REG.2.5V)
L1321 4.7u
L1322 4.7u
C1328 4.7
C1322 1
C1323 1
CL1022
RL1002
RL1004
C1326 1
CL1023
R1232 0
L1214 4.7u
C1218 6V10
C1214 10V1
R1311 0
CL1031
L1241 4.7u
R1241 0
CL1041
Q1391 B1ABBE000002 (SWITCHING M-4V)
Q1392 XP1401 (POWER CONTROL)
R1391 18K
R1392 220
R1394 12K
R1393 22K
Q1482 B1ABBE000002 (LCD ON Ⓗ :ON)
R1483 18K
R1484 220K
QR1491 B1GDBEHH0001 (LCD ON Ⓗ :ON)
D1091 MA2J11100L
L1291 4.7u
C1091 1
C1291 1
(NV-GS120GD ONLY)
C1241 1
C1249 4V47
R1280 0
(NV-GS120GD ONLY)
(NV-GS200GD ONLY)
Q1383 B1ADBE000001 (SWITCHING M13V)
R1380 47K
R1386 56K
R1387 7500
Q1384 XP1501 (POWER CONTROL)
R1389 10K
R1388 18K
CL1081
CL1051
T1051 G5DYA0000077:NV-GS200GD G5DYA0000075:NV-GS120GD
D1071 MA2J11100L
D1051 MA2J11100L
C1071 1
L1271 4.7u
C1271 1
D1081 MA2J11100L
C1081 1
C1052 1
C1056 1
C1053 2200P
R1056 100
C1054 0.01
R1051 33K:NV-GS200GD 27K:NV-GS120GD
R1054 100:NV-GS200GD 200:NV-GS120GD
R1055 2700
L1281 4.7u
C1281 1
L1251 4.7u
L1282 4.7u
D1151 MA8150LTX
D1152 MA2J11100L
R1155 10K
C1282 1
(NV-GS120GD ONLY)
R1281 0
(NV-GS200GD ONLY)
C1251 1
Q1381 B1ADBE000001 (SWITCHING EVF 8.5V)
R1385 47K
R1381 33K
R1382 2700
Q1382 XP1501 (POWER CONTROL)
R1390 3300
C1380 1
R1384 15K
R1383 18K
CL1082
CL1084
CL1071
CL1101
CL1053
12 13 14 15 16 17 18 19 20 21 22

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-GS200GD,GS120GD MAIN (POWER) SCHEMATIC DIAGRAM

NV-GS200GD,GS120GD MAIN (POWER) SCHEMATIC DIAGRAM


(MAIN C.B.A)
REFER TO MAIN CONNECTION
TO MAIN CN(F-23) <TO FRONT/SHOE>
K27 ST NOREG
TO MAIN CN(G-24) <TO CONTROL/LENS DRIVE/DRIVE>
K35 NOREG
TO MAIN CN(F-24) <TO CONTROL>
K43 SW NOREG
K42 OV PROTECT
TO MAIN CN(B-24) <TO CONTROL/EVR2>
K50 P ON Ⓗ
TO MAIN CN(E-24) <TO BATT>
K33 +B
K32 D
K34 GND
TO MAIN CN(E-24) <TO FRAME>
K36 FRAME
K37 D GND
RL1001
CL1001
CL1002
CL1003
CL1004
QR1001 B1GDBEHH0001 (POWER SUPPLY)
QR1002 B1GBBEKM0001 (POWER ON Ⓗ:ON)
C1001 4.7
C1002 4.7
LB1001 VLP0332A420
⚠ IP1001 K5H4021A0004
L1061 33u
C1061 10V3.3
Q1061 B1ZBZ0000040 (SWITCHING CAP VM)
L1062 180u
C1062 10V3.3
Q1062 B1ZBZ0000040 (SWITCHING CYL VM)
R1142 10K
QR1141 UN9214J (OUTPUT1 ON/OFF)
R1112 10K
C1113 0.1
QR1111 UN9214J (OUTPUT2 ON/OFF)
QR1104 UN9214J (ON/OFF CONTROL)
C1122 0.047
R1121 270
C1121 0.047
R1103 10K
C1104 0.1
IC1001 C0DBAZZ00073 (POWER SWITCHING CONTROL)
CS2
-INE2
FB2
DTC2
VCC
CTL
CTL3
CTL4
CTL5
-INS
VREF
RT
CT
GND
CSCP
DTC3
FB3
-INE3
CS3
CS1
-INE1
FB1
VCC O
OUT1-1
OUT1-2
OUT2
OUT3
OUT4
OUT5
GND O
CS5
-INE5
FB5
DTC5
DTC4
FB4
-INE4
CS4
ERROR AMP2
PWM COMP2
DRIVE2
DRIVE1-2
DRIVE1-1
DEAD TIME
PWM COMP1
ERROR AMP1
ERROR AMP SCP COMP
POWER ON/OFF CONTROL
VR
VREF
CH CONTROL
BIAS
SCP COMP
OSC
UVL01
UVL02
SCP
ERROR AMP5
DRIVE5
ERROR AMP3
PWM COMP3
DRIVE3
DRIVE4
PWM COMP4
ERROR AMP4
C1143 0.1
C1141 0.047
R1141 270
C1153 0.01
C1151 0.047
R1151 270
C1154 0.01
R1152 22K
R1153 15K
C1131 0.047
R1131 270
D1101 MA8110MTX
D1102 B0ACCJ000025
QR1102 B1GDBEHH0002 (OVER LOAD PROTECTOR)
QR1101 B1GBBEHH0001 (OVER LOAD PROTECTOR)
C1106 1
C1101 0.1
C1102 100P
C1103 0.033
R1102 11K:NV-GS200GD 13K:NV-GS120GD
R1101 13K:NV-GS200GD 12K:NV-GS120GD
R1111 270
C1111 0.047
Q1101 B1ABBE000002 (OSC CONTROL)
R1106 100K
R1105 220K
C1105 1
QR1103 UN9114J (OSC CONTROL)
A1
A2
A3
A4
A5
A6
C1
C2
C3
C4
C5
C6
C7
C8
C9
C10
C11
C12
C13
C14
C15
C16
Ⓐ
Ⓑ
Ⓒ
Ⓓ
G
F
E
D
C
B
A
1
2
3
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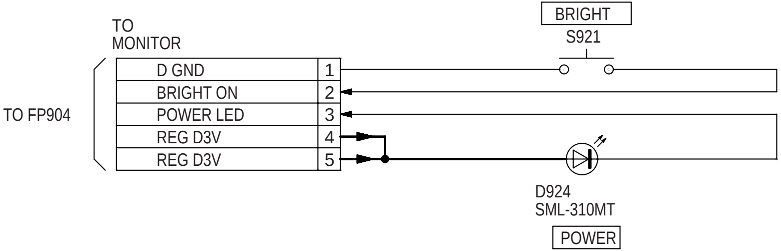
10
11

IMPORTANT SAFETY NOTICE:

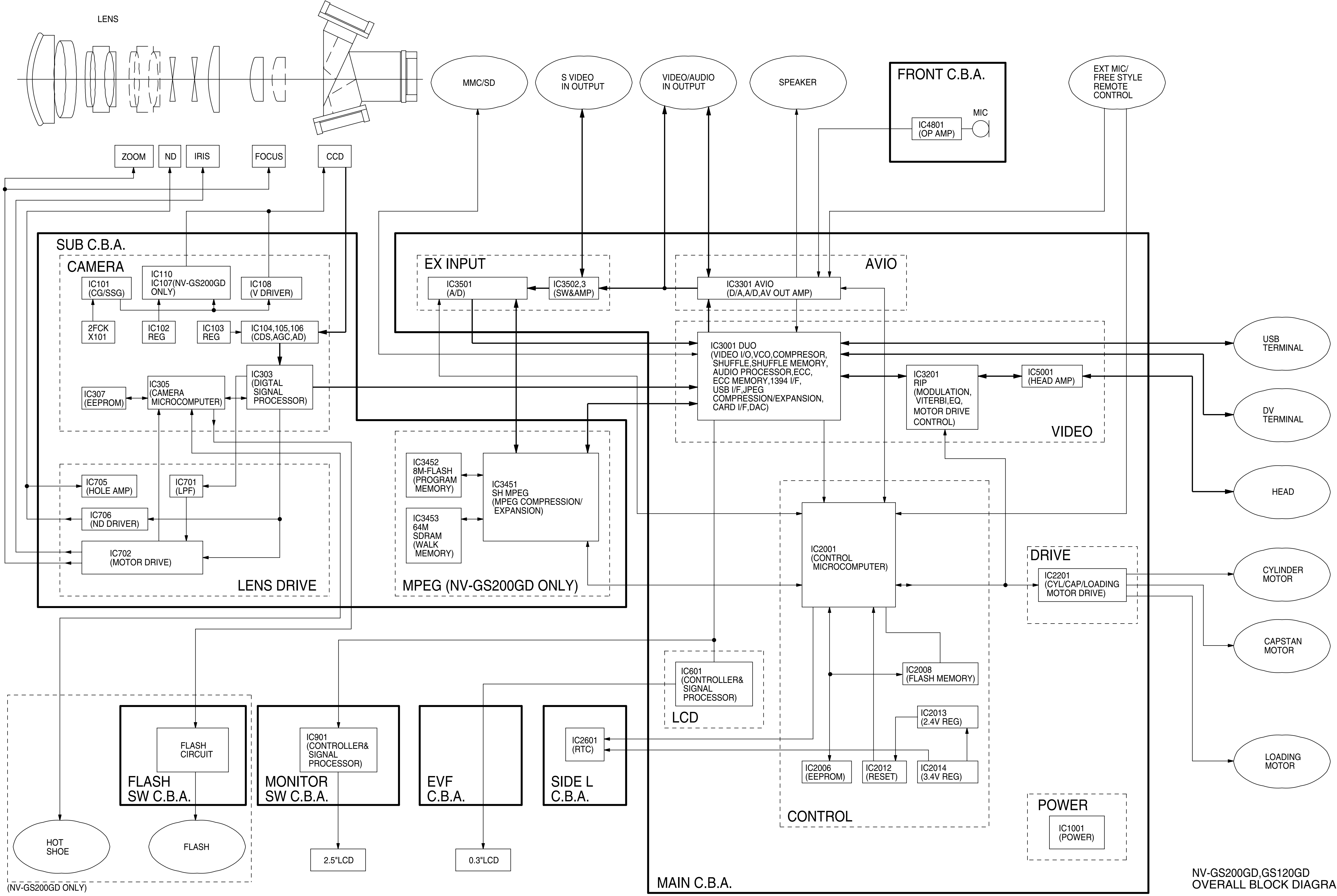
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NV-GS200GD,GS120GD
MAIN (POWER) SCHEMATIC DIAGRAM

(PL FLEX.CARD C.B.A.)


TO
MONITOR
TO FP904
D GND
BRIGHT ON
POWER LED
REG D3V
REG D3V
1
2
3
4
5
BRIGHT
S921
D924
SML-310MT
POWER

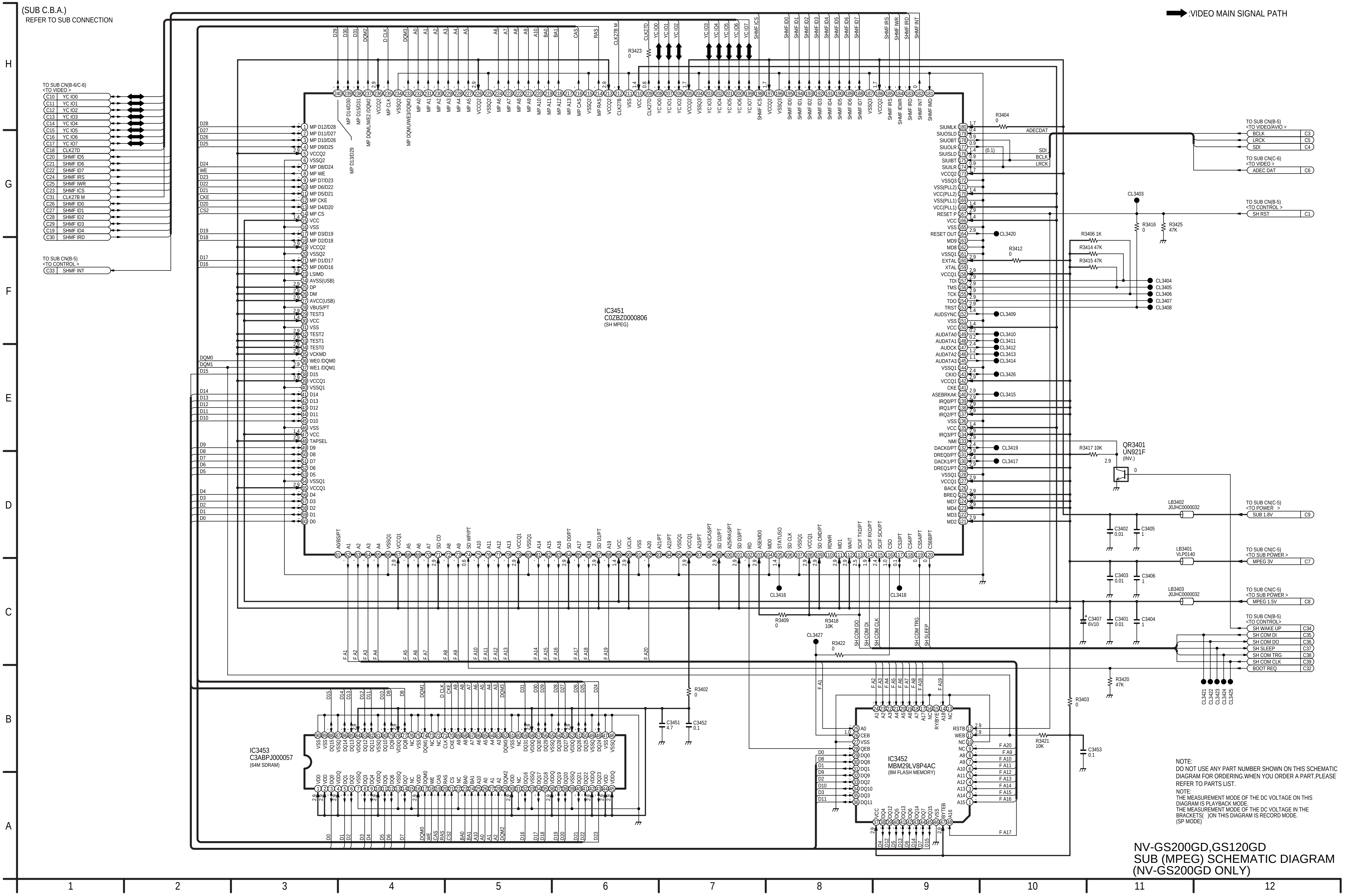
NV-GS200GD,GS120GD
PL FLEX. CARD SCHEMATIC DIAGRAM


LENS
ZOOM
ND
IRIS
FOCUS
CCD
MMC/SD
S VIDEO IN OUTPUT
VIDEO/AUDIO IN OUTPUT
SPEAKER
FRONT C.B.A.
IC4801 (OP AMP)
MIC
EXT MIC/ FREE STYLE REMOTE CONTROL
SUB C.B.A.
CAMERA
IC101 (CG/SSG)
IC110 IC107(NV-GS200GD ONLY)
IC108 (V DRIVER)
2FCK X101
IC102 REG
IC103 REG
IC104,105,106 (CDS,AGC,AD)
IC307 (EEPROM)
IC305 (CAMERA MICROCOMPUTER)
IC303 (DIGTAL SIGNAL PROCESSOR)
LENS DRIVE
IC705 (HOLE AMP)
IC701 (LPF)
IC706 (ND DRIVER)
IC702 (MOTOR DRIVE)
EX INPUT
IC3501 (A/D)
IC3502,3 (SW&AMP)
AVIO
IC3301 AVIO (D/A,A/D,AV OUT AMP)
IC3001 DUO (VIDEO I/O,VCO,COMPRESOR, SHUFFLE,SHUFFLE MEMORY, AUDIO PROCESSOR,ECC, ECC MEMORY,1394 I/F, USB I/F,JPEG COMPRESSION/EXPANSION, CARD I/F,DAC)
IC3201 RIP (MODULATION, VITERBI,EQ, MOTOR DRIVE CONTROL)
IC5001 (HEAD AMP)
VIDEO
USB TERMINAL
DV TERMINAL
HEAD
MPEG (NV-GS200GD ONLY)
IC3452 8M-FLASH (PROGRAM MEMORY)
IC3453 64M SDRAM (WALK MEMORY)
IC3451 SH MPEG (MPEG COMPRESSION/ EXPANSION)
CONTROL
IC2001 (CONTROL MICROCOMPUTER)
IC2008 (FLASH MEMORY)
IC2013 (2.4V REG)
IC2006 (EEPROM)
IC2012 (RESET)
IC2014 (3.4V REG)
DRIVE
IC2201 (CYL/CAP/LOADING MOTOR DRIVE)
CYLINDER MOTOR
CAPSTAN MOTOR
LOADING MOTOR
POWER
IC1001 (POWER)
LCD
IC601 (CONTROLLER& SIGNAL PROCESSOR)
MAIN C.B.A.
FLASH CIRCUIT
FLASH SW C.B.A.
IC901 (CONTROLLER& SIGNAL PROCESSOR)
MONITOR SW C.B.A.
EVF C.B.A.
IC2601 (RTC)
SIDE L C.B.A.
HOT SHOE
FLASH
(NV-GS200GD ONLY)
2.5"LCD
0.3"LCD

NV-GS200GD,GS120GD
OVERALL BLOCK DIAGRAM

(SUB C.B.A.)
REFER TO SUB CONNECTION

:VIDEO MAIN SIGNAL PATH



TO SUB CN(B-6/C-6) <TO VIDEO >
C10 YC IO0
C11 YC IO1
C12 YC IO2
C13 YC IO3
C14 YC IO4
C15 YC IO5
C16 YC IO6
C17 YC IO7
C18 CLK27D
C20 SHMF ID5
C21 SHMF ID6
C22 SHMF ID7
C24 SHMF IRS
C25 SHMF IWR
C23 SHMF ICS
C31 CLK27B M
C26 SHMF ID0
C27 SHMF ID1
C28 SHMF ID2
C29 SHMF ID3
C19 SHMF ID4
C30 SHMF IRD
TO SUB CN(B-5) <TO CONTROL >
C33 SHMF INT
IC3451
C0ZBZ0000806
(SH MPEG)
IC3453
C3ABPJ000057
(64M SDRAM)
IC3452
MBM29LV8P4AC
(8M FLASH MEMORY)
QR3401
UN921F
(INV.)
R3423 0
R3404 0
R3412 0
R3406 1K
R3414 47K
R3415 47K
R3416 0
R3425 47K
R3417 10K
R3409 0
R3418 10K
R3422 0
R3402 0
R3403 0
R3420 47K
R3421 10K
C3451 4.7
C3452 0.1
C3453 0.1
C3402 0.01
C3405 1
C3403 0.01
C3406 1
C3407 6V10
C3401 0.01
C3404 1
LB3402 J0JHC0000032
LB3401 VLP0140
LB3403 J0JHC0000032
CL3403
CL3404
CL3405
CL3406
CL3407
CL3408
CL3409
CL3410
CL3411
CL3412
CL3413
CL3414
CL3415
CL3416
CL3417
CL3418
CL3419
CL3420
CL3421
CL3422
CL3423
CL3424
CL3425
CL3426
CL3427
TO SUB CN(B-5) <TO VIDEO/AVIO >
BCLK C3
LRCK C5
SDI C4
TO SUB CN(C-6) <TO VIDEO >
ADEC DAT C6
TO SUB CN(B-5) <TO CONTROL >
SH RST C1
TO SUB CN(C-5) <TO POWER >
SUB 1.8V C9
TO SUB CN(C-5) <TO SUB POWER >
MPEG 3V C7
TO SUB CN(C-5) <TO SUB POWER >
MPEG 1.5V C8
TO SUB CN(B-5) <TO CONTROL>
SH WAKE UP C34
SH COM DI C35
SH COM DO C36
SH SLEEP C37
SH COM TRG C38
SH COM CLK C39
BOOT REQ C32
ADECDAT
SDI
BCLK
LRCK
SH COM DO
SH COM DI
SH COM CLK
SH COM TRG
SH SLEEP
A
B
C
D
E
F
G
H
1
2
3
4
5
6
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8
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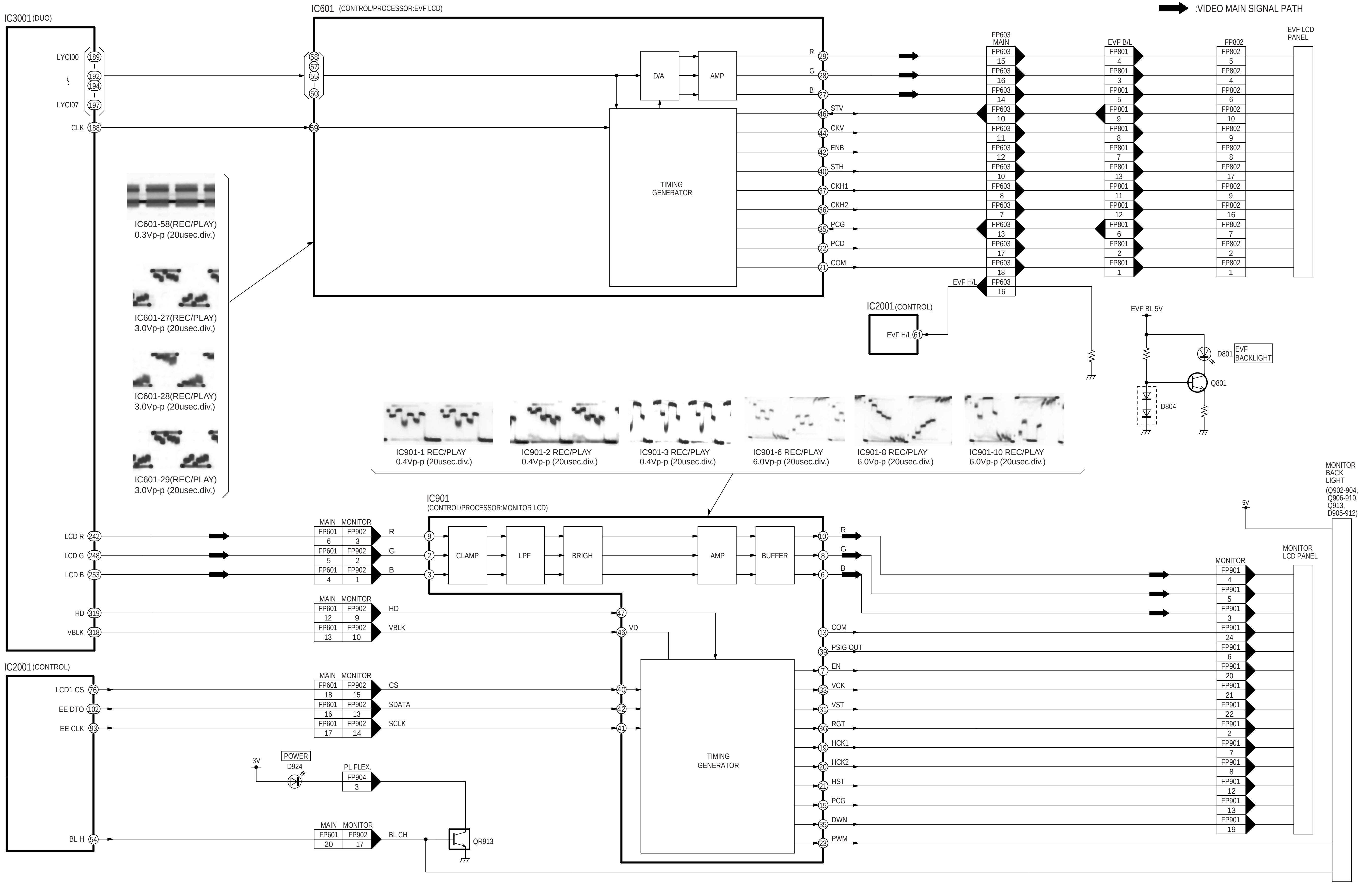
10
11
12

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

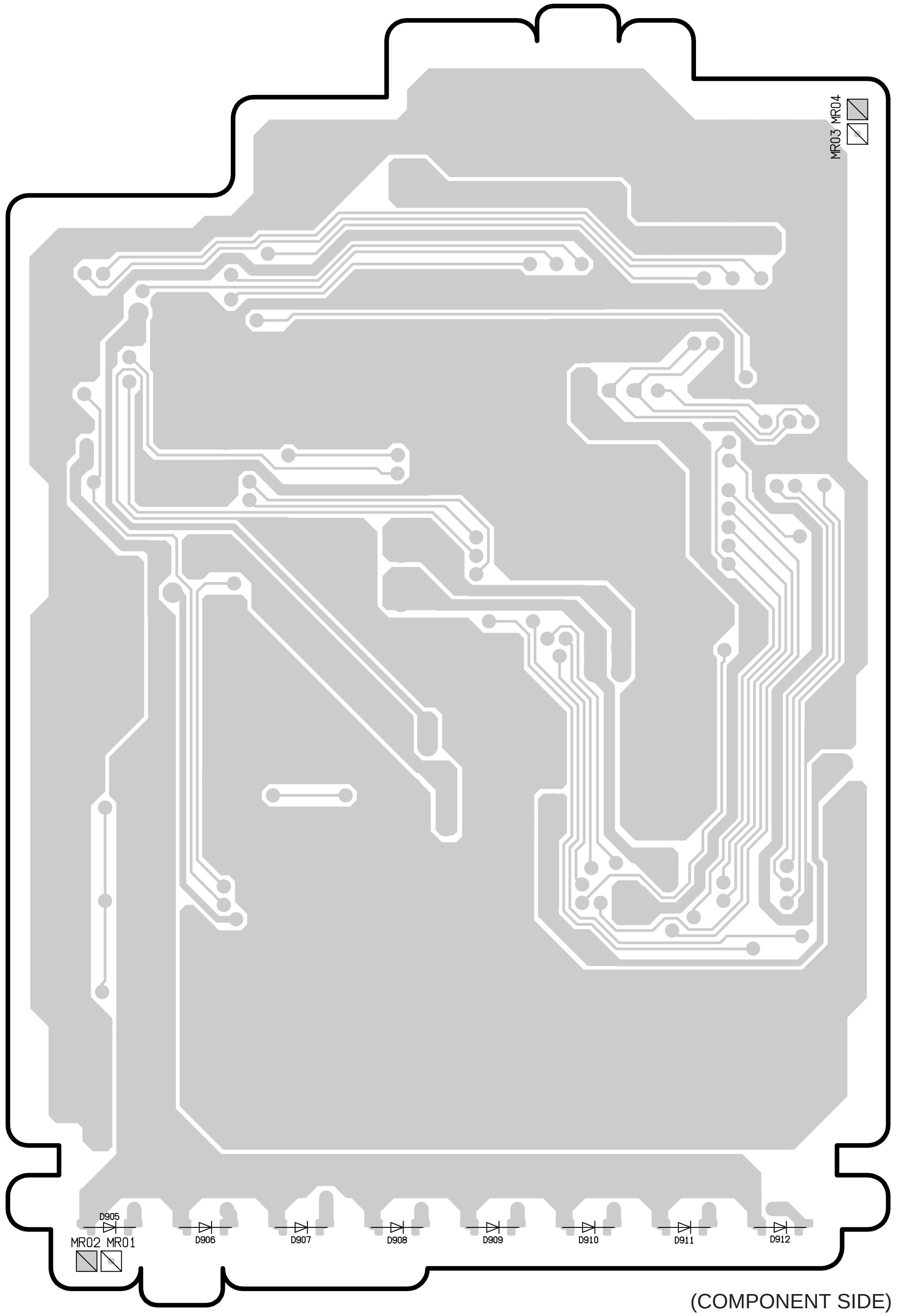
NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE.
(SP MODE)

NV-GS200GD,GS120GD
SUB (MPEG) SCHEMATIC DIAGRAM
(NV-GS200GD ONLY)

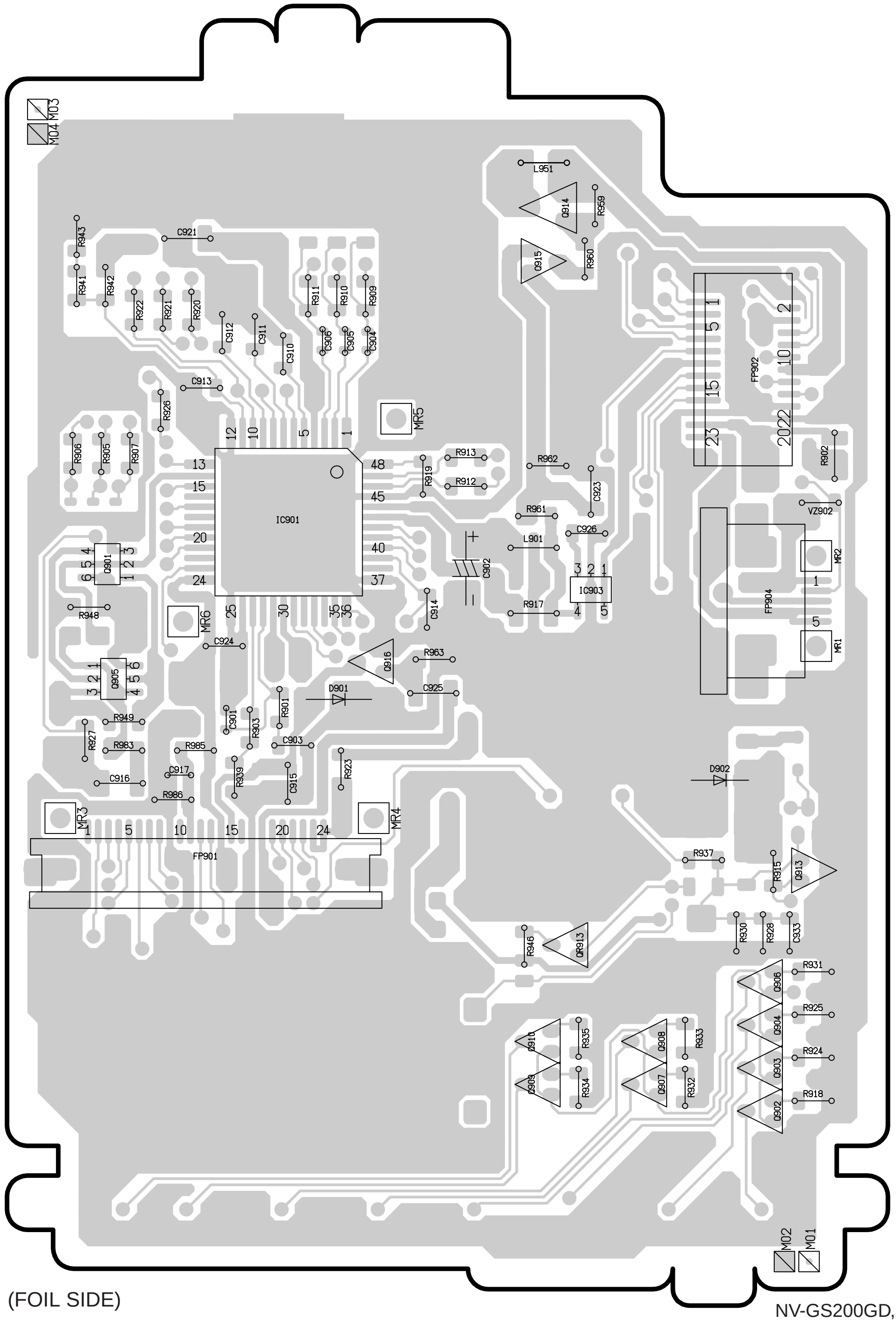

:VIDEO MAIN SIGNAL PATH
IC3001 (DUO)
LYCI00 189
192
194
LYCI07 197
CLK 188
LCD R 242
LCD G 248
LCD B 253
HD 319
VBLK 318
IC601 (CONTROL/PROCESSOR:EVF LCD)
58 57 55 50 59
D/A
AMP
TIMING GENERATOR
R 29
G 28
B 27
STV 46
CKV 44
ENB 42
STH 40
CKH1 37
CKH2 36
PCG 35
PCD 22
COM 21
FP603 MAIN
FP603 15, FP603 16, FP603 14, FP603 10, FP603 11, FP603 12, FP603 10, FP603 8, FP603 7, FP603 13, FP603 17, FP603 18, FP603 16
EVF H/L
EVF B/L
FP801 4, FP801 3, FP801 5, FP801 9, FP801 8, FP801 7, FP801 13, FP801 11, FP801 12, FP801 6, FP801 2, FP801 1
FP802
FP802 5, FP802 4, FP802 6, FP802 10, FP802 9, FP802 8, FP802 17, FP802 9, FP802 16, FP802 7, FP802 2, FP802 1
EVF LCD PANEL
IC2001 (CONTROL)
EVF H/L 61
EVF BL 5V
D801
EVF BACKLIGHT
Q801
D804
IC601-58(REC/PLAY) 0.3Vp-p (20usec.div.)
IC601-27(REC/PLAY) 3.0Vp-p (20usec.div.)
IC601-28(REC/PLAY) 3.0Vp-p (20usec.div.)
IC601-29(REC/PLAY) 3.0Vp-p (20usec.div.)
IC901-1 REC/PLAY 0.4Vp-p (20usec.div.)
IC901-2 REC/PLAY 0.4Vp-p (20usec.div.)
IC901-3 REC/PLAY 0.4Vp-p (20usec.div.)
IC901-6 REC/PLAY 6.0Vp-p (20usec.div.)
IC901-8 REC/PLAY 6.0Vp-p (20usec.div.)
IC901-10 REC/PLAY 6.0Vp-p (20usec.div.)
IC901 (CONTROL/PROCESSOR:MONITOR LCD)
MAIN MONITOR
FP601 6 FP902 3 R
FP601 5 FP902 2 G
FP601 4 FP902 1 B
FP601 12 FP902 9 HD
FP601 13 FP902 10 VBLK
FP601 18 FP902 15 CS
FP601 16 FP902 13 SDATA
FP601 17 FP902 14 SCLK
FP601 20 FP902 17 BL CH
9 2 3
CLAMP
LPF
BRIGH
AMP
BUFFER
R 10
G 8
B 6
47 HD
46 VD
40 42 41
TIMING GENERATOR
COM 13
PSIG OUT 39
EN 7
VCK 33
VST 31
RGT 36
HCK1 19
HCK2 20
HST 21
PCG 15
DWN 35
PWM 23
MONITOR
FP901 4, FP901 5, FP901 3, FP901 24, FP901 6, FP901 20, FP901 21, FP901 22, FP901 2, FP901 7, FP901 8, FP901 12, FP901 13, FP901 19
MONITOR LCD PANEL
MONITOR BACK LIGHT (Q902-904, Q906-910, Q913, D905-912)
5V
IC2001 (CONTROL)
LCD1 CS 76
EE DTO 102
EE CLK 93
BL H 54
3V
POWER
D924
PL FLEX.
FP904 3
QR913

NV-GS200GD,GS120GD
MONITOR BLOCK DIAGRAM

(VEP08334B)


MR03
MR04
D905
MR02
MR01
D906
D907
D908
D909
D910
D911
D912

(COMPONENT SIDE)


M03
M04
L951
Q914
R959
Q915
R960
C921
R943
R941
R942
R922
R921
R920
C912
C911
C910
R911
R910
R909
C906
C905
C904
FP902
C913
R926
MR5
R906
R905
R907
IC901
R913
R919
R912
R962
C923
R902
R961
L901
C926
VZ902
Q901
C902
IC903
MR2
FP904
R948
MR6
C914
R917
MR1
C924
Q916
R963
Q905
D901
C925
R949
C901
R903
R901
R927
R983
R985
C903
C916
C917
R939
C915
R923
R986
D902
MR3
MR4
FP901
R937
R915
Q913
R946
QR913
R930
R928
C933
R931
Q906
R925
Q904
R924
Q903
R918
Q902
Q910
R935
Q908
R933
Q909
R934
Q907
R932
M02
M01

(FOIL SIDE)

Monitor C.B.A.	
Integrated Circuit	
IC901	D-6
IC903	D-8
Transister	
Q901	D-6
Q902	B-9
Q903	B-9
Q904	B-9
Q905	C-6
Q906	B-9
Q907	B-8
Q908	B-8
Q909	B-8
Q910	B-8
Q913	C-9
Q914	E-8
Q915	E-8
Q916	D-7
Transister &Resister	
QR913	B-8
Connector	
FP901	C-6
FP902	E-8
FP904	D-8
Diode	
D901	C-7
D902	C-8
D905	A-1
D906	A-2
D907	A-2
D908	A-3
D909	A-3
D910	A-3
D911	A-4
D912	A-4
Absorber	
VZ902	D-9
Coil	
L901	D-8
L951	F-8
Capacitor	
C901	C-6
C902	D-7
C903	C-6
C904	E-7
C905	E-7
C906	E-7
C910	E-6
C911	E-6
C912	E-6
C913	E-6
C914	D-7
C915	C-6
C916	C-6
C917	C-6
C918	C-6
C921	E-6
C923	D-8
C924	D-6
C925	C-7
C926	D-8
C933	B-9
Resistor	
R901	C-6
R902	D-9
R903	C-6
R905	D-6
R906	D-6
R907	D-6
R909	E-7
R910	E-7
R911	E-7
R912	D-7
R913	D-7
R915	C-9
R917	D-8
R919	D-7
R920	E-6
R921	E-6
R922	E-6
R923	C-7
R924	B-9
R925	B-9
R926	E-6
R927	C-6
R928	B-8
R930	B-8
R931	B-9
R932	B-8
R933	B-8
R934	B-8
R935	B-8
R937	C-8
R939	C-6
R941	E-6
R942	E-6
R943	E-6
R946	B-7
R948	D-6
R949	C-6
R959	E-8
R960	E-8
R961	D-8
R962	D-8
R963	D-7
R983	C-6
R985	C-6
R986	C-6

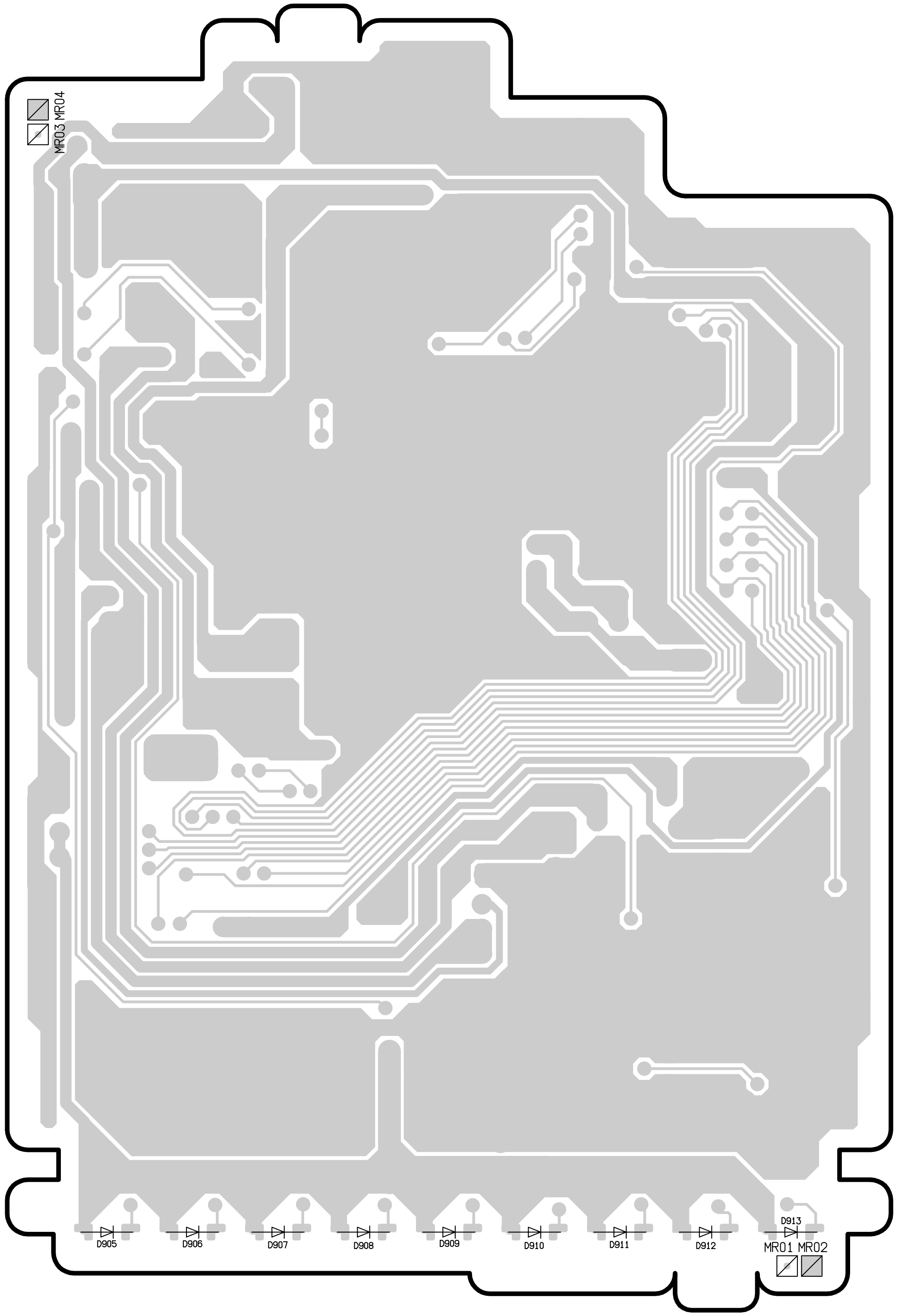
ADDRESS INFORMATION

NV-GS200GD,GS120GD
MONITOR C.B.A.
(NV-GS200GD ONLY)

F
E
D
C
B
A

1 2 3 4 5 6 7 8 9

(VEP08336A)


F
E
D
C
B
A
1
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4
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6
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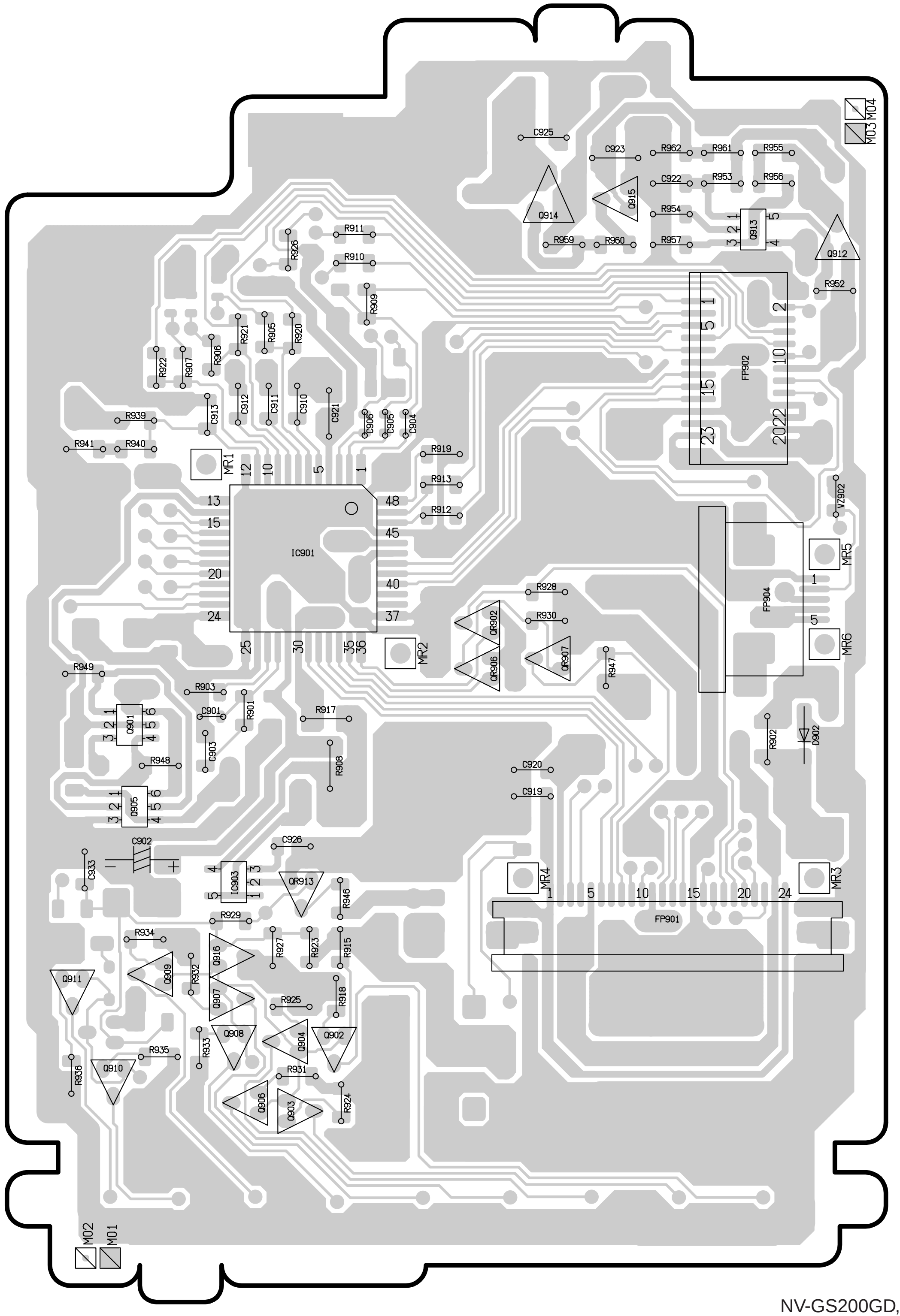
8
9
MR04
MR03
D905
D906
D907
D908
D909
D910
D911
D912
D913
MR01
MR02

(COMPONENT SIDE)


M04
M03
C925
C923
R962
R961
R955
C922
R953
R956
Q914
Q915
R954
Q913
Q912
R959
R960
R957
R952
R911
R910
R926
R909
FP902
R921
R905
R920
R922
R907
R906
R939
C913
C912
C911
C910
C921
C906
C905
C904
R941
R940
MR1
R919
R913
R912
IC901
MR5
VZ902
FP904
MR6
R928
R930
QR902
QR906
QR907
MR2
R947
R949
R903
C901
R901
Q901
R917
C903
R948
R908
R902
D902
C920
C919
Q905
C926
C902
C933
IC903
QR913
R946
MR4
MR3
FP901
R929
R934
R927
R923
R915
Q911
Q909
R932
Q916
Q907
R925
R918
Q908
Q904
Q902
R936
Q910
R935
R933
R931
Q906
Q903
R924
M02
M01

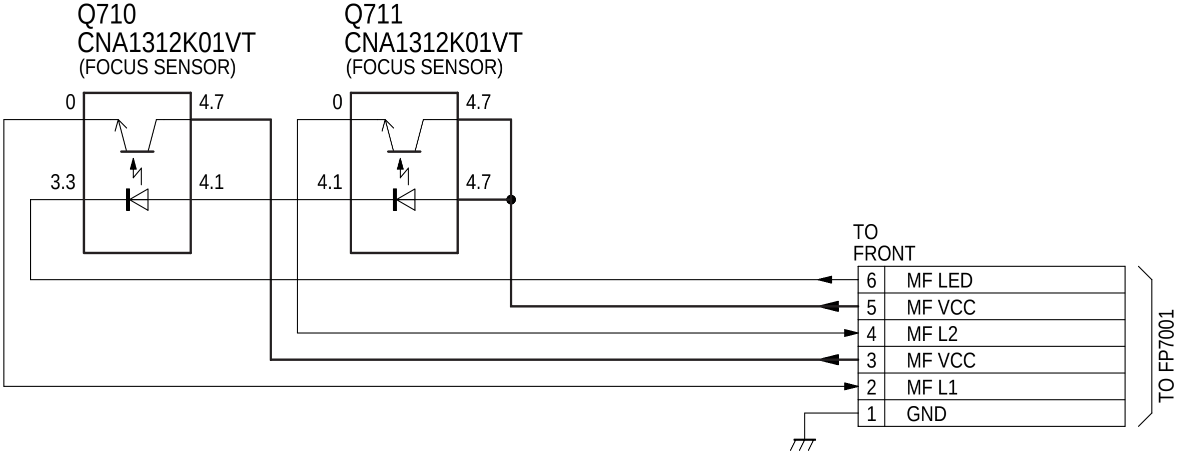
(FOIL SIDE)

Monitor C.B.A.			
Integrated Circuit		C925	F-8
IC901	D-6	C926	C-6
IC903	C-6	C933	C-6
Transister		**Resistor**	
Q901	C-6	R901	C-6
Q902	B-7	R902	C-8
Q903	B-6	R903	C-6
Q904	B-6	R905	E-6
Q905	C-6	R906	E-6
Q906	B-6	R907	E-6
Q907	B-6	R908	C-7
Q908	B-6	R909	E-7
Q909	B-6	R910	E-7
Q910	B-6	R911	E-7
Q911	B-6	R912	D-7
Q912	E-9	R913	D-7
Q913	E-8	R915	B-7
Q914	E-8	R917	C-7
Q915	E-8	R918	B-7
Q916	B-6	R919	D-7
Transister &Resister		R920	E-6
QR902	D-7	R921	E-6
QR906	C-7	R922	E-6
QR907	D-8	R923	B-7
QR913	C-6	R924	B-7
Connector		R925	B-6
FP901	B-8	R926	E-6
FP902	E-8	R927	B-6
FP904	D-8	R928	D-8
Diode		R929	B-6
D902	C-9	R930	D-8
D905	A-1	R931	B-6
D906	A-2	R932	B-6
D907	A-2	R933	B-6
D908	A-2	R934	B-6
D909	A-3	R935	B-6
D910	A-3	R936	B-6
D911	A-4	R939	E-6
D912	A-4	R940	D-6
D913	A-4	R941	D-6
Absorber		R946	B-7
VZ902	D-9	R947	C-8
Capacitor		R948	C-6
C901	C-6	R949	C-6
C902	C-6	R952	E-9
C903	C-6	R953	F-8
C904	E-7	R954	E-8
C905	E-7	R955	F-8
C906	E-7	R956	F-8
C910	E-6	R957	E-8
C911	E-6	R959	E-8
C912	E-6	R960	E-8
C913	E-6	R961	F-8
C919	C-7	R962	F-8
C920	C-7		
C921	E-7		
C922	F-8		
C923	F-8		

ADDRESS INFORMATION

NV-GS200GD,GS120GD
MONITOR C.B.A.
(NV-GS120GD ONLY)

(MF SENSOR C.B.A.)



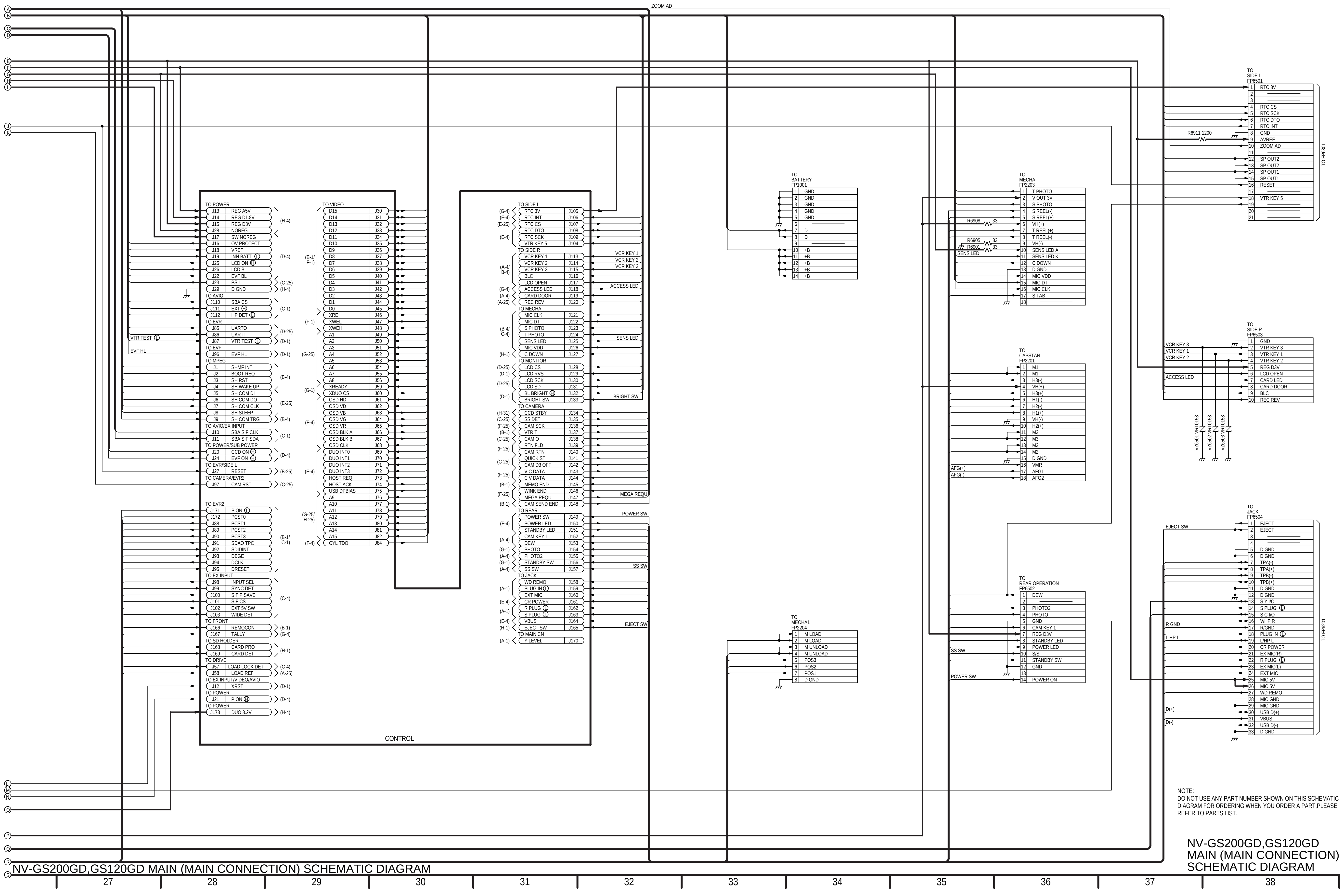
Q710
CNA1312K01VT
(FOCUS SENSOR)
Q711
CNA1312K01VT
(FOCUS SENSOR)
0
4.7
3.3
4.1
0
4.7
4.1
4.7
TO
FRONT
6 MF LED
5 MF VCC
4 MF L2
3 MF VCC
2 MF L1
1 GND
TO FP7001

B
A
1
2
3

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-GS200GD,GS120GD
MF SENSOR SCHEMATIC DIAGRAM
(NV-GS200GD ONLY)


A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
ZOOM AD
VTR TEST L
EVF HL
CONTROL
TO POWER
J13 REG A5V
J14 REG D1.8V
J15 REG D3V
J28 NOREG
J17 SW NOREG
J16 OV PROTECT
J18 VREF
J19 INN BATT L
J25 LCD ON H
J26 LCD BL
J22 EVF BL
J23 PS L
J29 D GND
(H-4)
(D-4)
(C-25)
(H-4)
TO AVIO
J110 SBA CS
J111 EXT H
J112 HP DET L
(C-1)
TO EVR
J85 UARTO
J86 UARTI
J87 VTR TEST L
(D-25)
(D-1)
TO EVF
J52 EVF HL
(D-1)
TO MPEG
J1 SHMF INT
J2 BOOT REQ
J3 SH RST
J4 SH WAKE UP
J5 SH COM DI
J6 SH COM DO
J7 SH COM CLK
J8 SH SLEEP
J9 SH COM TRG
(B-4)
(E-25)
(B-4)
TO AVIO/EX INPUT
J10 SBA SIF CLK
J11 SBA SIF SDA
(C-1)
TO POWER/SUB POWER
J20 CCD ON H
J24 EVF ON H
(D-4)
TO EVR/SIDE L
J27 RESET
(B-25)
TO CAMERA/EVR2
J97 CAM RST
(C-25)
TO EVR2
J171 P ON L
J172 PCST0
J88 PCST1
J89 PCST2
J90 PCST3
J91 SDAO TPC
J92 SDIDINT
J93 DBGE
J94 DCLK
J95 DRESET
(B-1/ C-1)
TO EX INPUT
J98 INPUT SEL
J99 SYNC DET
J100 SIF P SAVE
J101 SIF CS
J102 EXT 5V SW
J103 WIDE DET
(C-4)
TO FRONT
J166 REMOCON
J167 TALLY
(B-1)
(G-4)
TO SD HOLDER
J168 CARD PRO
J169 CARD DET
(H-1)
TO DRIVE
J57 LOAD LOCK DET
J58 LOAD REF
(C-4)
(A-25)
TO EX INPUT/VIDEO/AVIO
J12 XRST
(D-1)
TO POWER
J21 P ON H
(D-4)
TO POWER
J173 DUO 3.2V
(H-4)
TO VIDEO
D15 J30
D14 J31
D13 J32
D12 J33
D11 J34
D10 J35
D9 J36
D8 J37
D7 J38
D6 J39
D5 J40
D4 J41
D3 J42
D2 J43
D1 J44
D0 J45
XRE J46
XWEL J47
XWEH J48
A1 J49
A2 J50
A3 J51
A4 J52
A5 J53
A6 J54
A7 J55
A8 J56
XREADY J59
XDUO CS J60
OSD HD J61
OSD VD J62
OSD VB J63
OSD VG J64
OSD VR J65
OSD BLK A J66
OSD BLK B J67
OSD CLK J68
DUO INT0 J69
DUO INT1 J70
DUO INT2 J71
DUO INT3 J72
HOST REQ J73
HOST ACK J74
USB DPBIAS J75
A9 J76
A10 J77
A11 J78
A12 J79
A13 J80
A14 J81
A15 J82
CYL TDO J84
(E-1/ F-1)
(F-1)
(G-25)
(G-1)
(F-4)
(E-4)
(G-25/ H-25)
(F-4)
TO SIDE L
RTC 3V J105
RTC INT J106
RTC CS J107
RTC DTO J108
RTC SCK J109
VTR KEY 5 J104
(G-4)
(E-4)
(E-25)
(E-4)
TO SIDE R
VCR KEY 1 J113
VCR KEY 2 J114
VCR KEY 3 J115
BLC J116
LCD OPEN J117
ACCESS LED J118
CARD DOOR J119
REC REV J120
(A-4/ B-4)
(G-4)
(A-4)
(A-25)
TO MECHA
MIC CLK J121
MIC DT J122
S PHOTO J123
T PHOTO J124
SENS LED J125
MIC VDD J126
C DOWN J127
(B-4/ C-4)
(H-1)
TO MONITOR
LCD CS J128
LCD RVS J129
LCD SCK J130
LCD SD J131
BL BRIGHT H J132
BRIGHT SW J133
(D-25)
(D-1)
(D-25)
(D-1)
TO CAMERA
CCD STBY J134
SS DET J135
CAM SCK J136
VTR T J137
CAM O J138
RTN FLD J139
CAM RTN J140
QUICK ST J141
CAM D3 OFF J142
V C DATA J143
C V DATA J144
MEMO END J145
WINK END J146
MEGA REQU J147
CAM SEND END J148
(H-31)
(C-25)
(F-25)
(B-1)
(C-25)
(F-25)
(C-25)
(F-25)
(B-1)
(F-25)
(B-1)
TO REAR
POWER SW J149
POWER LED J150
STANDBY LED J151
CAM KEY 1 J152
DEW J153
PHOTO J154
PHOTO2 J155
STANDBY SW J156
SS SW J157
(F-4)
(A-4)
(G-1)
(A-4)
(G-1)
(A-4)
TO JACK
WD REMO J158
PLUG IN L J159
EXT MIC J160
CR POWER J161
R PLUG L J162
S PLUG L J163
VBUS J164
EJECT SW J165
(A-1)
(E-4)
(A-1)
(E-4)
(H-1)
TO MAIN CN
Y LEVEL J170
(A-1)
VCR KEY 1
VCR KEY 2
VCR KEY 3
ACCESS LED
SENS LED
BRIGHT SW
MEGA REQU
POWER SW
SS SW
EJECT SW
TO BATTERY FP1001
1 GND
2 GND
3 GND
4 GND
5 GND
6
7 D
8 D
9
10 +B
11 +B
12 +B
13 +B
14 +B
TO MECHA1 FP2204
1 M LOAD
2 M LOAD
3 M UNLOAD
4 M UNLOAD
5 POS3
6 POS2
7 POS1
8 D GND
TO MECHA FP2203
1 T PHOTO
2 V OUT 3V
3 S PHOTO
4 S REEL(-)
5 S REEL(+)
6 VH(+)
7 T REEL(+)
8 T REEL(-)
9 VH(-)
10 SENS LED A
11 SENS LED K
12 C DOWN
13 D GND
14 MIC VDD
15 MIC DT
16 MIC CLK
17 S TAB
18
R6908 33
R6905 33
R6901 33
SENS LED
TO CAPSTAN FP2201
1 M1
2 M1
3 H3(-)
4 VH(+)
5 H3(+)
6 H1(-)
7 H2(-)
8 H1(+)
9 VH(-)
10 H2(+)
11 M3
12 M3
13 M2
14 M2
15 D GND
16 VMR
17 AFG1
18 AFG2
AFG(+)
AFG(-)
TO REAR OPERATION FP6502
1 DEW
2
3 PHOTO2
4 PHOTO
5 GND
6 CAM KEY 1
7 REG D3V
8 STANDBY LED
9 POWER LED
10 S/S
11 STANDBY SW
12 GND
13
14 POWER ON
SS SW
POWER SW
TO SIDE L FP6501
1 RTC 3V
2
3
4 RTC CS
5 RTC SCK
6 RTC DTO
7 RTC INT
8 GND
9 AVREF
10 ZOOM AD
11
12 SP OUT2
13 SP OUT2
14 SP OUT1
15 SP OUT1
16 RESET
17
18 VTR KEY 5
19
20
21
R6911 1200
TO FP6301
TO SIDE R FP6503
1 GND
2 VTR KEY 3
3 VTR KEY 1
4 VTR KEY 2
5 REG D3V
6 LCD OPEN
7 CARD LED
8 CARD DOOR
9 BLC
10 REC REV
VCR KEY 3
VCR KEY 1
VCR KEY 2
ACCESS LED
VZ6501 VRT0158
VZ6502 VRT0158
VZ6503 VRT0158
TO JACK FP6504
1 EJECT
2 EJECT
3
4
5 D GND
6 D GND
7 TPA(-)
8 TPA(+)
9 TPB(-)
10 TPB(+)
11 D GND
12 D GND
13 S Y I/O
14 S PLUG L
15 S C I/O
16 V/HP R
17 R/GND
18 PLUG IN L
19 L/HP L
20 CR POWER
21 EX MIC(R)
22 R PLUG L
23 EX MIC(L)
24 EXT MIC
25 MIC 5V
26 MIC 5V
27 WD REMO
28 MIC GND
29 MIC GND
30 USB D(+)
31 VBUS
32 USB D(-)
33 D GND
EJECT SW
R GND
L HP L
D(+)
D(-)
TO FP6201
27
28
29
30
31
32
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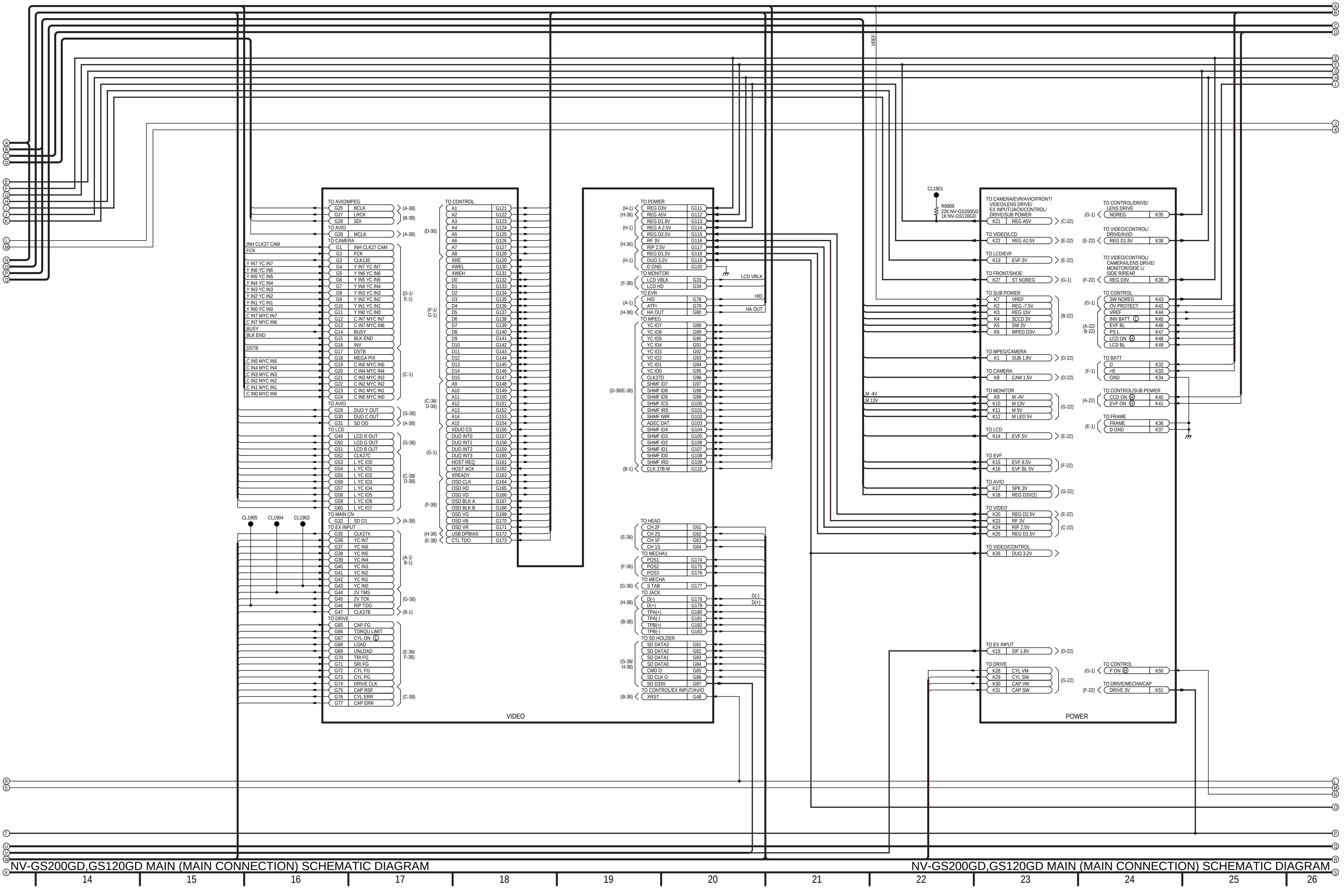
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-GS200GD,GS120GD MAIN (MAIN CONNECTION) SCHEMATIC DIAGRAM

NV-GS200GD,GS120GD
MAIN (MAIN CONNECTION)
SCHEMATIC DIAGRAM


TO AVIO/MPEG
G25 BCLK
G27 LRCK
G28 SDI
(A-38)
(B-38)
TO AVIO
G26 MCLK (A-38)
TO CAMERA
INH CLK27 CAM
FCK
G1 INH CLK27 CAM
G2 FCK
G3 CLK135
G4 Y IN7 YC IN7
G5 Y IN6 YC IN6
G6 Y IN5 YC IN5
G7 Y IN4 YC IN4
G8 Y IN3 YC IN3
G9 Y IN2 YC IN2
G10 Y IN1 YC IN1
G11 Y IN0 YC IN0
G12 C IN7 MYC IN7
G13 C IN7 MYC IN6
G14 BUSY
G15 BLK END
G16 INV
G17 DSTB
G18 MEGA PIX
G19 C IN5 MYC IN5
G20 C IN4 MYC IN4
G21 C IN3 MYC IN3
G22 C IN2 MYC IN2
G23 C IN1 MYC IN1
G24 C IN0 MYC IN0
(D-1/ E-1)
(C-1)
TO AVIO
G29 DUO Y OUT
G30 DUO C OUT
G31 SD OO
(G-38)
(A-38)
TO LCD
G49 LCD R OUT
G50 LCD G OUT
G51 LCD B OUT
G52 CLK27C
G53 L YC IO0
G54 L YC IO1
G55 L YC IO2
G56 L YC IO3
G57 L YC IO4
G58 L YC IO5
G59 L YC IO6
G60 L YC IO7
(G-38)
(C-38/ D-38)
TO MAIN CN
G32 SD O1 (A-38)
TO EX INPUT
G35 CLK27X
G36 YC IN7
G37 YC IN6
G38 YC IN5
G39 YC IN4
G40 YC IN3
G41 YC IN2
G42 YC IN1
G43 YC IN0
G44 2V TMS
G45 2V TCK
G46 RIP TDO
G47 CLK27B
(A-1/ B-1)
(G-36)
(B-1)
CL1905
CL1904
CL1903
TO DRIVE
G65 CAP FG
G66 TORQU LIMIT
G67 CYL ON Ⓛ
G68 LOAD
G69 UNLOAD
G70 TRI FG
G71 SRI FG
G72 CYL FG
G73 CYL PG
G74 DRIVE CLK
G75 CAP RSF
G76 CYL ERR
G77 CAP ERR
(E-36/ F-36)
(C-38)
TO CONTROL
A1 G121
A2 G122
A3 G123
A4 G124
A5 G125
A6 G126
A7 G127
A8 G128
XRE G129
XWEL G130
XWEH G131
D0 G132
D1 G133
D2 G134
D3 G135
D4 G136
D5 G137
D6 G138
D7 G139
D8 G140
D9 G141
D10 G142
D11 G143
D12 G144
D13 G145
D14 G146
D15 G147
A9 G148
A10 G149
A11 G150
A12 G151
A13 G152
A14 G153
A15 G154
XDUO CS G155
DUO INT0 G157
DUO INT1 G158
DUO INT2 G159
DUO INT3 G160
HOST REQ G161
HOST ACK G162
XREADY G163
OSD CLK G164
OSD HD G165
OSD VD G166
OSD BLK A G167
OSD BLK B G168
OSD VG G169
OSD VB G170
OSD VR G171
USB DPBIAS G172
CTL TDO G173
(D-36)
(F-1/ G-1)
(C-36/ D-36)
(G-1)
(F-38)
(H-38)
(E-38)
TO POWER
REG D3V G111
REG A5V G112
REG D1.8V G113
REG A 2.5V G114
REG D2.5V G115
RF 3V G116
RIP 2.5V G117
REG D1.5V G118
DUO 3.2V G119
D GND G120
(H-1)
(H-36)
(H-1)
(H-36)
(H-1)
TO MONITOR
LCD VBLK G33
LCD HD G34
(F-38)
LCD VBLK
TO EVR
HID G78
ATFI G79
HA OUT G80
(A-1)
(H-36)
HID
HA OUT
TO MPEG
YC IO7 G88
YC IO6 G89
YC IO5 G90
YC IO4 G91
YC IO3 G92
YC IO2 G93
YC IO1 G94
YC IO0 G95
CLK27D G96
SHMF ID7 G97
SHMF ID6 G98
SHMF ID5 G99
SHMF IRS G101
SHMF ICS G100
SHMF IWR G102
ADEC DAT G103
SHMF ID4 G104
SHMF ID3 G105
SHMF ID2 G106
SHMF ID1 G107
SHMF ID0 G108
SHMF IRD G109
CLK 27B M G110
(D-38/E-38)
(B-1)
TO HEAD
CH 2F G61
CH 2S G62
CH 1F G63
CH 1S G64
(E-36)
TO MECHA1
POS1 G174
POS2 G175
POS3 G176
(F-36)
TO MECHA
S TAB G177
(G-36)
TO JACK
D(-) G178
D(+) G179
TPA(+) G180
TPA(-) G181
TPB(+) G182
TPB(-) G183
(H-38)
(B-38)
D(-)
D(+)
TO SD HOLDER
SD DATA3 G81
SD DATA2 G82
SD DATA1 G83
SD DATA0 G84
CMD O G85
SD CLK O G86
SD D33V G87
(G-38/ H-38)
TO CONTROL/EX INPUT/AVIO
XRST G48
(B-38)
VIDEO
VREF
CL1901
R6909
22K:NV-GS200GD
1K:NV-GS120GD
TO CAMERA/EVR/AVIO/FRONT/ VIDEO/LENS DRIVE/ EX INPUT/JACK/CONTROL/ DRIVE/SUB POWER
K21 REG A5V (C-22)
TO VIDEO/LCD
K22 REG A2.5V (E-22)
TO LCD/EVF
K13 EVF 3V (E-22)
TO FRONT/SHOE
K27 ST NOREG (G-1)
TO SUB POWER
K7 VREF
K2 REG -7.5V
K3 REG 15V
K4 3CCD 3V
K5 SW 3V
K6 MPEG D3V
(B-22)
TO MPEG/CAMERA
K1 SUB 1.8V (D-22)
TO CAMERA
K8 CAM 1.5V (D-22)
TO MONITOR
M -4V
M 13V
K9 M -4V
K10 M 13V
K11 M 5V
K12 M LED 5V
(G-22)
TO LCD
K14 EVF 5V (E-22)
TO EVF
K15 EVF 8.5V
K16 EVF BL 5V
(F-22)
TO AVIO
K17 SPK 3V
K18 REG D3V(2)
(G-22)
TO VIDEO
K20 REG D2.5V (E-22)
K23 RF 3V
K24 RIP 2.5V
K25 REG D1.5V
(C-22)
TO VIDEO/CONTROL
K26 DUO 3.2V
TO EX INPUT
K19 SIF 1.8V (D-22)
TO DRIVE
K28 CYL VM
K29 CYL SW
K30 CAP VM
K31 CAP SW
(G-22)
TO CONTROL/DRIVE/ LENS DRIVE
(G-1) NOREG K35
TO VIDEO/CONTROL/ DRIVE/AVIO
(E-22) REG D1.8V K38
TO VIDEO/CONTROL/ CAMERA/LENS DRIVE/ MONITOR/SIDE L/ SIDE R/REAR
(F-22) REG D3V K39
TO CONTROL
SW NOREG K43
OV PROTECT K42
VREF K44
INN BATT Ⓛ K45
EVF BL K46
PS L K47
LCD ON Ⓗ K48
LCD BL K49
(G-1)
(A-22/ B-22)
TO BATT
D K32
+B K33
GND K34
(F-1)
TO CONTROL/SUB POWER
CCD ON Ⓗ K40
EVF ON Ⓗ K41
(A-22)
TO FRAME
FRAME K36
D GND K37
(E-1)
TO CONTROL
(G-1) P ON Ⓗ K50
TO DRIVE/MECHA/CAP
(F-22) DRIVE 3V K51
POWER
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
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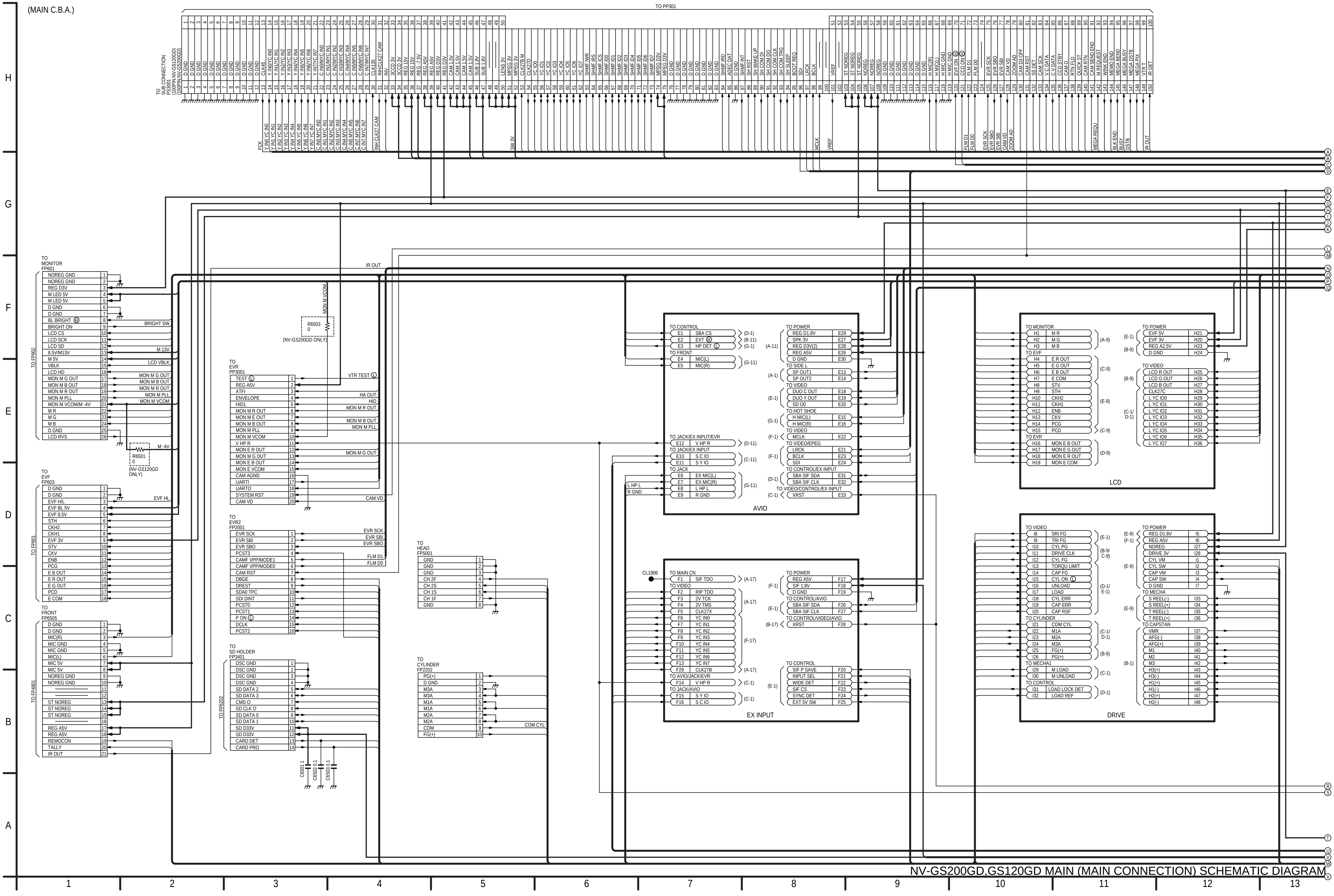
NV-GS200GD,GS120GD MAIN (MAIN CONNECTION) SCHEMATIC DIAGRAM

NV-GS200GD,GS120GD MAIN (MAIN CONNECTION) SCHEMATIC DIAGRAM


(MAIN C.B.A.)
TO PP301
TO SUB CONNECTION PS3001 (140PIN:NV-GS120GD) (150PIN:NV-GS200GD)
TO MONITOR FP601
TO FP902
TO EVF FP603
TO FP801
TO FRONT FP6505
TO FP4801
TO EVR PP3001
TO EVR2 FP2001
TO SD HOLDER FP3401
TO FP6202
TO HEAD FP5001
TO CYLINDER FP2202
R6503 0 (NV-GS200GD ONLY)
R6501 0 (NV-GS120GD ONLY)
C6501 1
C6502 0.1
C6503 0.1
CL1906
AVIO
EX INPUT
LCD
DRIVE
TO CONTROL
TO FRONT
TO POWER
TO SIDE L
TO VIDEO
TO HOT SHOE
TO VIDEO/EPEG
TO CONTROL/VIDEO/AVIO
TO VIDEO/CONTROL/EX INPUT
TO JACK/EX INPUT/EVR
TO JACK/EX INPUT
TO JACK
TO MAIN CN
TO CONTROL/AVIO
TO AVIO/JACK/EVR
TO JACK/AVIO
TO MONITOR
TO EVF
TO EVR
TO MECHA
TO CYLINDER
TO CAPSTAN
TO MECHA1
IR OUT
BRIGHT SW
M 13V
LCD VBLK
MON M G OUT
MON M B OUT
MON M R OUT
MON M PLL
MON M VCOM
M -4V
EVF H/L
VTR TEST
HA OUT
HID
MON M R OUT
CAM VD
EVR SCK
EVR SBI
EVR SBO
FLM D1
FLM D0
COM CYL
SW 3V
MCLK
VREF
MEGA REQU
BLK END
BUSY
DSTB
IR OUT
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
1
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NV-GS200GD,GS120GD MAIN (MAIN CONNECTION) SCHEMATIC DIAGRAM

Main C.B.A.

Integrated Circuit		
IC601	E-5	F
IC602	E-4	C
IC1001	C-3	F
IC1321	D-7	C
IC1322	D-2	F
IC2001	C-7	F
IC2006	B-3	C
IC2008	C-6	F
IC2009	C-3	C
IC2012	C-3	C
IC2014	C-3	C
IC2015	C-3	C
IC2017	C-2	C
IC2018	B-6	F
IC2019	C-6	F
IC2201	C-7	C
IC2202	B-3	F
IC3001	D-5	C
IC3201	B-2	C
IC3301	E-4	F
IC3501	C-4	F
IC3502	D-4	F
IC3503	D-5	F
IC5001	B-9	F
Transister		
Q601	B-5	C
Q602	B-5	C
Q603	B-5	C
Q1011	D-2	F
Q1021	D-2	F
Q1031	D-3	F
Q1041	C-2	F
Q1042	C-2	F
Q1051	B-2	F
Q1061	B-1	F
Q1062	B-2	F
Q1101	C-3	F
Q1381	F-3	F
Q1382	F-2	F
Q1383	B-2	F
Q1384	B-2	F
Q1391	B-3	F
Q1392	B-3	F
Q1412	E-3	F
Q1413	D-3	F
Q1421	F-2	F
Q1422	E-2	F
Q1482	B-3	F
Q2001	C-3	C
Q2002	C-4	C
Q2003	C-7	F
Q2004	C-4	C
Q2005	B-5	F
Q3301	D-4	F
Q3302	D-4	F
Q3303	D-4	F
Q3503	C-5	F
Q3504	C-6	F
Q3505	D-6	F
Q3506	C-4	C
Transister &Resister		
QR1001	B-8	C
QR1002	B-8	C
QR1101	D-1	F
QR1102	E-1	F
QR1103	C-3	F
QR1104	D-7	C
QR1111	D-7	C
QR1141	C-7	C
QR1401	E-2	F
QR1411	E-2	F
QR1413	E-2	F
QR1491	A-3	F
QR2001	B-6	F
QR2002	B-6	F
QR2003	D-8	F
QR2004	D-8	F
QR2005	B-6	F
QR2006	A-5	F
QR2007	B-2	C
QR2008	B-4	F
QR2009	B-4	F
QR2010	D-3	C
QR3001	D-4	C
QR3501	C-5	F
QR3502	C-6	F
Test Point		
CL1001	B-9	C
CL1002	B-1	F
CL1003	C-8	C
CL1004	B-8	C
CL1005	C-8	C
CL1011	E-2	F
CL1021	E-2	F
CL1022	E-4	C
CL1023	D-6	C
CL1031	C-7	C
CL1041	E-5	C
CL1051	E-2	F
CL1053	C-3	F
CL1071	B-2	F
CL1081	B-2	F
CL1082	E-3	F
CL1084	B-3	F
CL1091	A-3	F
CL1101	B-3	F
CL1901	A-8	C
CL1903	B-3	F
CL1904	B-3	F
CL1905	B-4	F
CL1906	B-3	F
CL2001	C-9	F
CL2002	B-7	F
CL2003	B-3	C
CL2004	B-7	F
CL2005	B-8	F
CL2007	B-7	F
CL2008	C-2	F
CL2009	A-6	F
CL2010	B-6	F
CL2011	B-6	F
CL2012	A-8	C
CL2022	B-3	C
CL2023	B-3	C
CL2025	B-3	C
CL2026	A-7	F
CL2027	D-7	F
CL2030	D-2	C
CL2031	D-2	C
CL2033	B-6	F
CL2034	B-5	F
CL2035	B-7	F
CL2036	F-8	C
CL2204	C-7	C
CL2205	A-6	C
CL3001	E-9	C
CL3002	E-9	C
CL3004	B-4	C
CL3005	C-4	C
CL3006	C-4	C
CL3007	D-6	C
CL3008	D-6	C
CL3009	D-6	C
CL3010	D-6	C
CL3201	A-2	C
CL3203	B-1	C
CL3207	A-2	C
CL3208	A-2	C
CL3213	A-2	C
CL3503	B-4	F
CL3504	B-4	F
CL5001	B-8	F
RL1001	B-8	C
RL1002	D-6	C
RL1004	D-6	C
RL1005	E-2	F
RL2030	B-6	F
RL3001	C-6	C
RL3002	C-6	C
RL3003	C-6	C
RL3004	B-2	C
RL3005	D-6	C
RL3006	D-5	C
RL3007	C-3	C
RL3008	A-2	C
RL3009	A-2	C
RL3010	A-2	C
RL3011	B-1	C
RL3012	E-5	F
RL3013	D-6	C
RL3014	A-2	C
RL3015	D-6	C
RL3016	D-6	C
RL3017	D-6	C
RL3018	D-6	C
RL3019	C-1	C
RL3020	C-3	C
RL3021	C-2	C
RL3022	C-2	C
RL3023	C-2	C
RL3024	B-6	F
RL3025	C-3	C
RL3026	C-3	C
RL3027	C-3	C
RL3028	C-3	C
RL3029	C-3	C
RL3030	D-6	C
RL3031	E-6	C
RL3032	E-5	C
Connector		
FP1001	C-9	C
FP2001	A-2	F
FP2201	B-7	C
FP2202	B-4	C
FP2203	B-5	F
FP2204	B-3	C
FP3401	E-7	C
FP5001	A-8	F
FP601	B-5	C
FP603	E-6	C
FP6501	B-5	C
FP6502	C-1	F
FP6503	E-8	C
FP6504	E-8	C
FP6505	C-8	F
PP3001	A-8	C
PS3001	E-6	C
Fuse		
IP1001	B-9	C
Diode		
D1011	D-1	F
D1021	D-2	F
D1031	D-2	F
D1041	D-2	F
D1051	C-2	F
D1071	B-1	F
D1081	C-2	F
D1091	B-3	F
D1101	E-1	F
D1102	D-1	F
D1151	E-1	F
D1152	E-1	F
D1421	E-1	F
D2001	C-3	C
D2002	C-4	C
D2003	B-7	F
D2004	D-7	F
D2008	C-4	C
D2201	B-6	C
D3301	E-4	F
Absorber		
VZ6501	E-9	C
VZ6502	F-8	C
VZ6503	E-8	C
Transformer		
T1051	C-8	C
Crystal Ocillator		
X2002	A-6	F
X3001	D-6	C
X3002	E-4	C
Coil		
L1011	D-8	C
L1021	D-7	C
L1031	C-8	C
L1041	D-8	C
L1061	B-9	C
L1062	B-8	C
L1211	E-3	F
L1214	E-3	F
L1221	E-2	F
L1223	B-3	F
L1224	B-3	F
L1226	D-3	F
L1241	F-5	C
L1251	E-2	F
L1271	B-2	F
L1281	B-2	F
L1282	B-2	F
L1291	B-2	F
L1321	D-7	C
L1322	D-7	C
L3019	D-6	C
L3025	F-5	C
L3027	E-4	C
L3204	B-2	C
L3301	F-3	F
L3302	E-3	F
L3303	D-4	F
L3304	E-3	F
L3305	F-5	F
L3501	D-4	F
L3505	D-6	F
L3506	D-6	F
L3507	D-6	F
L3508	D-6	F
L3509	D-6	F
L5001	B-8	F
L5002	B-8	F
LB1001	B-9	C
LB3001	B-6	C
LB3002	C-5	C
LB3003	D-4	C
LB3004	D-4	C
LB3007	E-4	C
LB3011	D-4	C
LB3012	D-4	C
LB3013	D-7	C
LB3201	B-3	C
LB3203	B-2	C
LB3301	F-4	F
LB3501	D-5	F
LB3502	C-5	F
Capacitor		
C602	E-5	F
C603	D-5	F
C610	F-5	F
C613	E-6	F
C614	E-4	C
C618	E-6	F
C619	E-4	C
C620	E-6	F
C1001	C-1	F
C1002	B-1	F
C1011	D-1	F
C1012	D-7	C
C1013	D-3	F
C1021	D-2	F
C1022	D-7	C
C1023	B-3	F
C1024	B-3	F
C1031	D-3	F
C1032	C-7	C
C1033	D-3	F
C1041	C-2	F
C1042	C-8	C
C1043	C-3	F
C1044	C-2	F
C1051	C-2	F
C1052	B-2	F
C1053	C-2	F
C1054	C-2	F
C1056	B-2	F
C1061	B-9	C
C1062	B-7	C
C1071	B-1	F
C1081	B-2	F
C1091	B-3	F
C1101	C-3	F
C1102	C-3	F
C1103	D-3	F
C1104	B-3	F
C1105	C-3	F
C1106	E-1	F
C1111	D-3	F
C1113	C-3	F
C1121	C-3	F
C1122	C-3	F
C1131	D-2	F
C1141	C-2	F
C1143	C-3	F
C1151	C-2	F
C1153	C-2	F
C1154	D-2	F
C1211	E-2	F
C1214	F-3	F
C1218	E-3	F
C1221	E-3	F
C1223	B-3	F
C1224	B-3	F
C1226	E-3	F
C1228	D-3	F
C1241	E-5	C
C1249	E-5	C
C1251	E-2	F
C1271	B-2	F
C1281	B-2	F
C1282	B-2	F
C1291	B-3	F
C1322	D-7	C
C1323	D-7	C
C1326	D-2	F
C1328	D-6	C
C1380	F-2	F
C1401	C-8	C
C1411	D-3	F
C1421	E-2	F
C2004	A-7	F
C2005	C-8	F
C2006	B-3	C
C2007	C-3	C
C2008	D-6	F
C2009	C-3	C
C2010	B-2	C
C2012	D-6	F
C2014	A-7	F
C2015	A-6	F
C2016	B-8	F
C2017	B-8	F
C2018	A-6	F
C2020	B-5	F
C2022	B-5	F
C2023	B-8	F
C2024	B-3	C
C2025	B-8	F
C2026	B-6	F
C2047	C-7	F
C2062	B-6	F
C2063	B-6	F
C2064	B-8	F
C2070	B-4	C
C2075	B-3	C
C2076	B-5	F
C2084	B-8	F
C2090	C-3	C
C2091	C-8	F
C2201	C-7	C
C2202	C-7	C
C2203	B-7	C
C2204	C-6	C
C2205	B-7	C
C2206	B-7	C
C2207	B-7	C
C2208	B-6	C
C2209	C-7	C
C2212	C-7	C
C2213	B-7	C
C2216	B-6	C
C2217	B-5	C
C2218	B-4	C
C2219	B-4	C
C2220	B-6	C
C2221	C-6	C
C2222	C-6	C
C2223	C-6	C
C2225	C-6	C
C2226	D-6	C
C2230	C-7	C
C2231	C-6	C
C2232	C-6	C
C3001	D-4	C
C3003	D-4	C
C3004	E-4	C
C3005	E-5	C
C3006	C-4	C
C3014	D-5	C
C3015	D-6	C
C3016	D-5	C
C3017	C-6	C
C3018	D-4	C
C3019	C-6	C
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C3028	C-6	C
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C3032	C-4	C
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C3040	C-6	C
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C3044	D-6	C
C3045	D-6	C
C3046	D-7	C
C3052	D-4	C
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C3229	B-2	C
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C3306	E-3	F
C3307	E-3	F
C3308	D-5	F
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C3312	E-5	F
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C3319	E-5	F
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C3323	D-4	F
C3324	D-4	F
C3327	D-5	F
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C3333	E-4	F
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C3344	E-5	F
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C3508	D-4	F
C3509	D-4	F
C3510	D-4	F
C3511	B-3	F
C3512	D-4	F
C3513	D-4	F
C3514	D-4	F
C3515	D-4	F
C3516	D-4	F
C3518	B-4	F
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C3522	D-5	F
C3523	D-5	F
C3551	D-5	F
C3552	E-6	F
C3553	D-6	F
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C3559	C-5	F
C3560	C-6	F
C3561	D-6	F
C3562	D-6	F
C3563	D-6	F
C3566	C-4	C
C3569	D-5	F
C3570	D-4	F
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C5003	B-8	F
C5005	B-9	F
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C5012	B-1	C
C5013	B-9	F
C5014	A-9	F
C5021	B-8	F
C5022	B-8	F
C5023	B-8	F
C5024	B-8	F
C6501	E-8	C
C6502	E-7	C
C6503	E-8	C
Resistor		
R601	E-5	F
R602	D-5	F
R603	E-5	F
R604	E-6	F
R605	E-6	F
R606	F-5	F
R607	F-6	F
R608	E-6	F
R609	B-5	C
R611	E-6	F
R612	E-6	F
R614	E-4	C
R615	E-4	C
R616	B-5	C
R617	B-5	C
R640	F-6	F
R641	F-5	F
R642	E-6	F
R1011	D-3	F
R1014	D-3	F
R1015	D-3	F
R1021	B-3	F
R1024	B-3	F
R1025	B-3	F
R1026	B-3	F
R1031	D-3	F
R1034	D-3	F
R1035	D-3	F
R1041	C-3	F
R1044	C-2	F
R1045	C-2	F
R1046	C-2	F
R1051	C-2	F
R1054	C-2	F
R1055	C-2	F
R1056	C-2	F
R1101	D-3	F
R1102	C-3	F
R1103	B-3	F
R1104	D-7	C
R1105	C-3	F
R1106	C-3	F
R1111	D-3	F
R1112	D-7	C
R1121	C-3	F
R1131	D-2	F
R1141	C-2	F
R1142	C-7	C
R1151	C-2	F
R1152	D-2	F
R1153	D-2	F
R1155	E-1	F
R1221	B-3	F
R1232	E-3	F
R1241	E-5	C
R1280	B-2	F
R1281	B-2	F
R1311	D-7	C
R1380	B-2	F
R1381	E-2	F
R1382	E-2	F
R1383	E-2	F
R1384	F-2	F
R1385	F-2	F
R1386	B-2	F
R1387	B-2	F
R1388	B-2	F
R1389	B-3	F
R1390	F-2	F
R1391	B-3	F
R1392	B-3	F
R1393	A-3	F
R1394	A-3	F
R1401	C-8	C
R1402	C-8	C
R1413	E-3	F
R1414	E-3	F
R1415	D-3	F
R1416	D-3	F
R1421	E-2	F
R1422	E-2	F
R1423	E-2	F
R1424	E-2	F
R1483	B-3	F
R1484	B-3	F
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R2002	B-6	F
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R2004	B-8	F
R2006	C-3	C
R2007	C-8	F
R2008	B-2	C
R2009	B-8	F
R2010	B-8	F
R2012	B-7	F
R2013	B-7	F
R2015	C-6	F
R2017	D-7	F
R2018	A-5	F
R2019	C-8	F
R2020	C-6	F
R2022	D-3	C
R2023	C-3	C
R2024	C-6	F
R2025	C-6	F
R2026	C-3	C
R2027	C-2	C
R2028	B-6	F
R2029	B-6	F
R2030	B-7	F
R2032	B-3	C
R2033	B-3	C
R2034	D-7	F
R2035	C-8	F
R2036	C-8	F
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R2042	C-8	F
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R2047	B-6	F
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R2082	B-7	F
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R2096	C-7	F
R2097	C-8	F
R2107	B-6	F
R2109	C-7	F
R2110	C-7	F
R2111	C-7	F
R2112	C-7	F
R2124	D-7	F
R2128	B-5	F
R2129	B-6	F
R2133	C-5	F
R2140	C-8	F
R2141	C-8	F
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R2158	C-8	F
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R2204	C-7	C
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R2206	C-7	C
R2207	C-7	C
R2210	B-7	C
R2211	B-7	C
R2212	B-6	C
R2213	B-6	C
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R2222	C-6	C
R2224	C-7	C
R2225	C-7	C
R2226	B-6	C
R2255	B-4	F
R2256	A-4	F
R3002	D-6	C
R3003	D-4	C
R3004	D-6	C
R3005	D-4	C
R3006	D-4	C
R3007	D-4	C
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R3010	C-5	C
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R3012	B-4	C
R3013	D-6	C
R3014	D-6	C
R3015	C-6	C
R3016	C-4	C
R3017	C-4	C
R3020	D-6	C
R3021	C-4	C
R3022	D-6	C
R3023	D-6	C
R3024	D-6	C
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R3026	D-6	C
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R3033	E-4	C
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R3035	E-4	C
R3036	E-4	C
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R3046	D-4	C
R3048	C-4	C
R3051	C-5	C
R3063	C-6	C
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R3077	D-5	C
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R3202	B-2	C
R3203	B-2	C
R3204	B-2	C
R3205	B-1	C
R3206	B-1	C
R3207	B-1	C
R3211	B-2	C
R3212	B-1	C
R3214	A-2	C
R3215	A-1	C
R3218	A-2	C
R3219	A-2	C
R3221	B-3	C
R3222	B-3	C
R3223	B-3	C
R3260	B-1	C
R3301	E-5	F
R3302	D-4	F
R3308	D-4	F
R3309	D-5	F
R3310	E-4	F
R3311	D-5	F
R3312	D-5	F
R3313	E-4	F
R3314	E-4	F
R3315	D-4	F
R3316	D-5	F
R3317	D-5	F
R3318	E-5	F
R3320	F-5	F
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R3322	D-4	F
R3323	D-4	F
R3324	D-4	F
R3325	D-4	F
R3326	D-4	F
R3330	E-5	F
R3501	B-3	F
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R3504	D-5	F
R3505	D-5	F
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R3507	D-4	F
R3508	D-5	F
R3514	C-4	C
R3515	D-4	F
R3516	C-4	C
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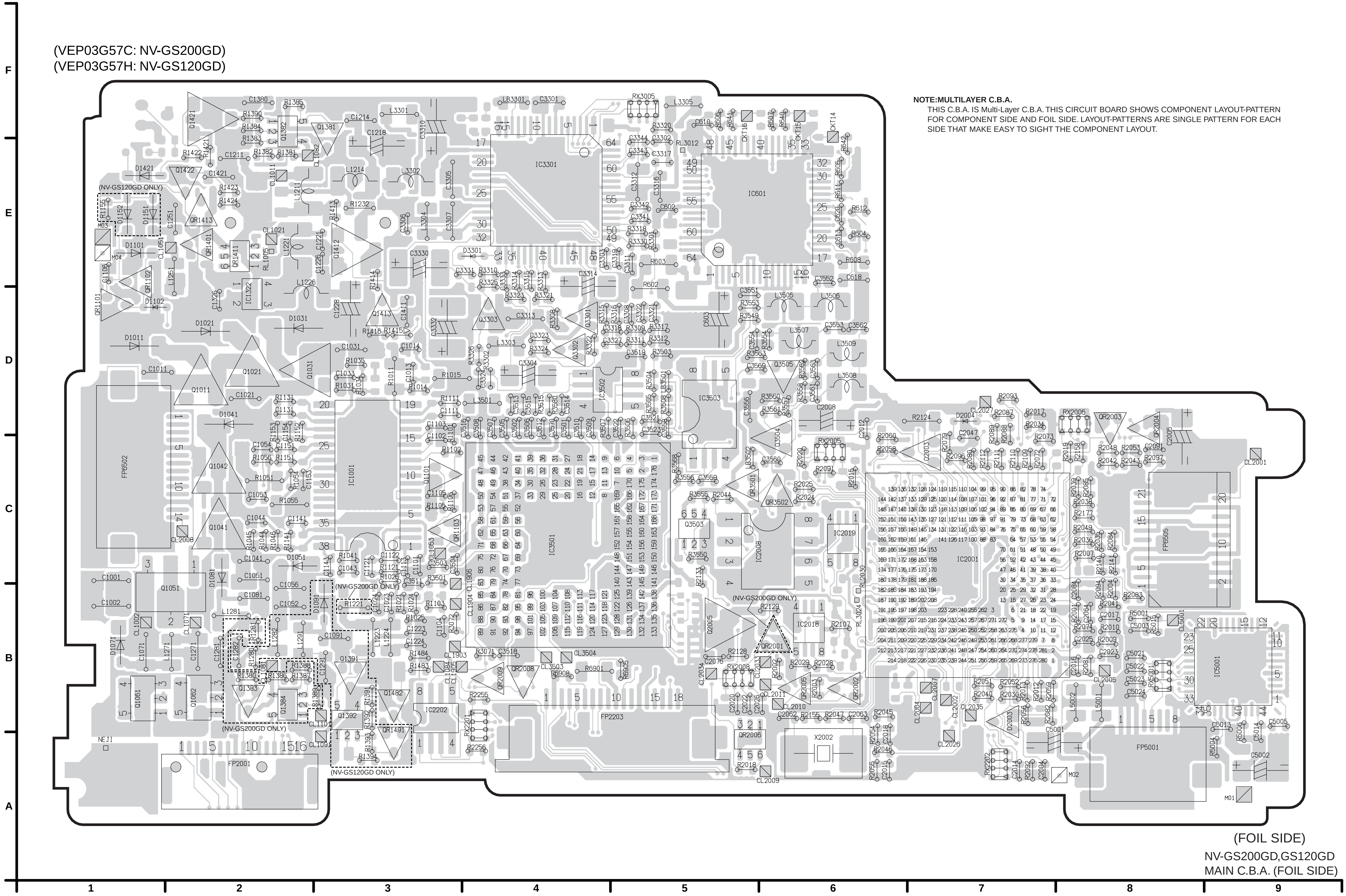
R3553	D-5	F
R3554	D-6	F
R3555	C-5	F
R3556	C-5	F
R3557	D-6	F
R3558	D-6	F
R3560	D-6	F
R3561	D-6	F
R3562	D-6	F
R3563	D-5	F
R3564	C-4	C
R3565	C-4	C
R3568	C-5	F
R3580	D-4	F
R5001	B-8	F
R5004	A-9	F
R5006	A-9	F
R5015	B-8	F
R6501	B-6	C
R6503	B-6	C
R6901	B-4	F
R6905	B-5	F
R6908	B-4	F
R6909	B-8	C
R6911	B-5	C
RX2002	B-4	C
RX2004	B-3	C
RX2005	C-6	F
RX2006	D-8	F
RX2008	B-5	F
RX2009	B-4	C
RX2010	B-4	C
RX2201	B-4	F
RX2202	A-7	F
RX3002	C-4	C
RX3003	C-4	C
RX3004	C-4	C
RX3005	F-5	F
RX3201	B-3	C
RX3202	A-1	C
RX5001	B-8	F

ADDRESS INFORMATION C...COMPONENT SIDE F...FOIL SIDE

(VEP03G57C: NV-GS200GD)
(VEP03G57H: NV-GS120GD)

NOTE:MULTILAYER C.B.A.

THIS C.B.A. IS Multi-Layer C.B.A. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT-PATTERNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.


F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
IC3301
IC601
IC1001
IC3501
IC3502
IC3503
IC2001
IC2008
IC2018
IC2019
IC2202
IC5001
IC1322
FP6502
FP6505
FP2001
FP2203
FP5001
X2002
Q1051
Q1061
Q1062
Q1384
Q1392
Q3503
QR2006
(NV-GS120GD ONLY)
(NV-GS200GD ONLY)
NEJI
M01
M02
M03
M04

(FOIL SIDE)

NV-GS200GD,GS120GD
MAIN C.B.A. (FOIL SIDE)

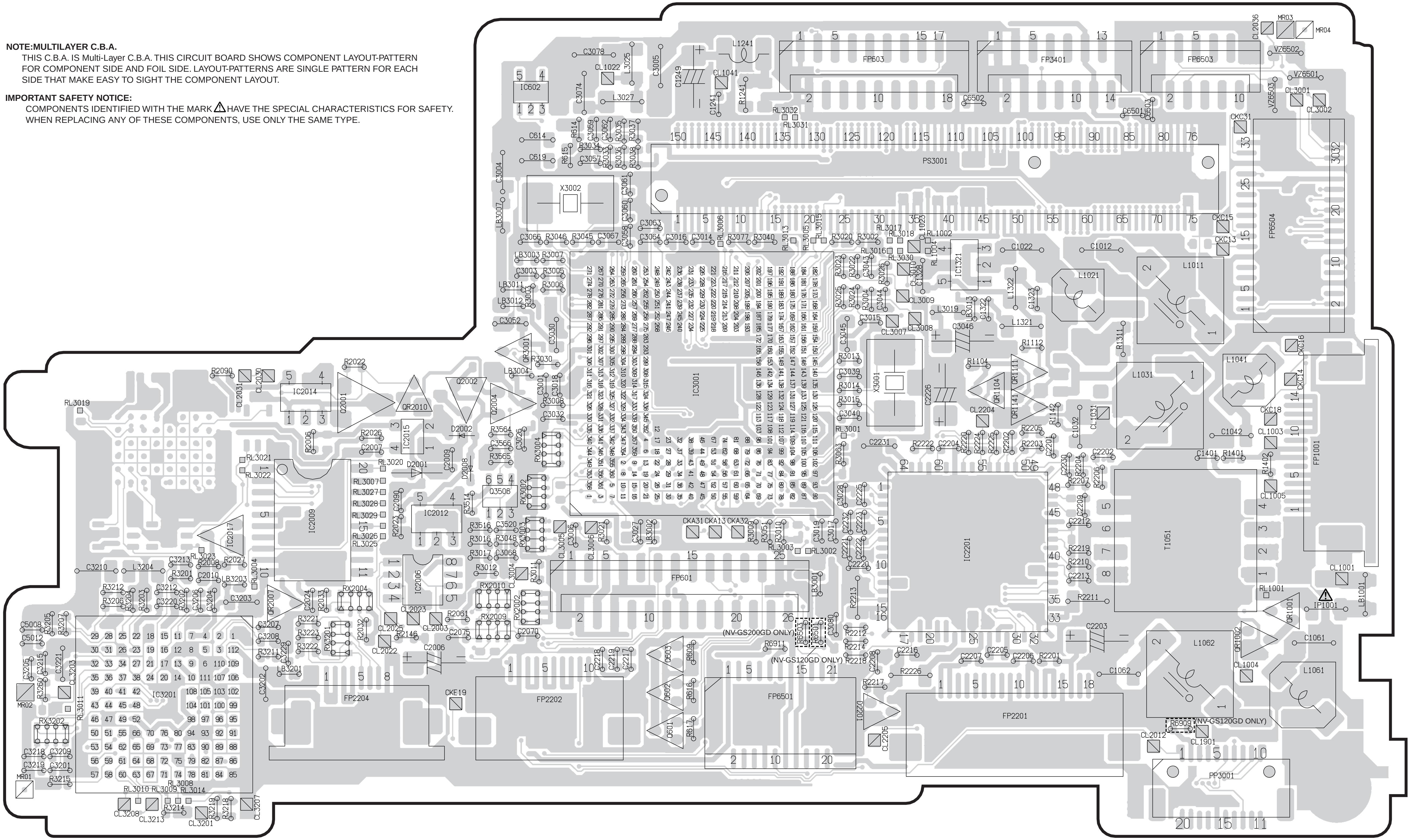
(VEP03G57C: NV-GS200GD)
(VEP03G57H: NV-GS120GD)

NOTE:MULTILAYER C.B.A.

THIS C.B.A. IS Multi-Layer C.B.A. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT-PATTERNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.

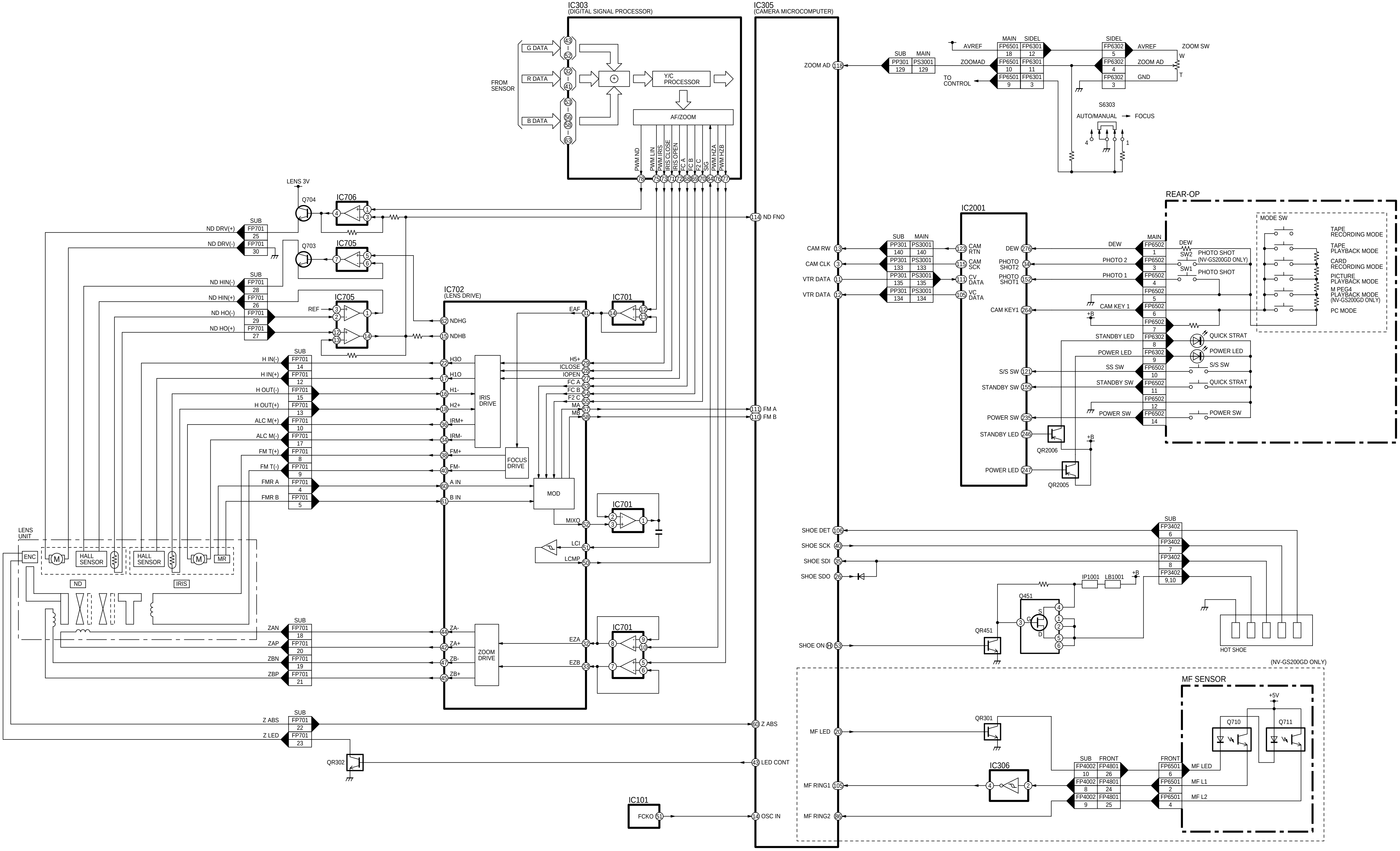
IMPORTANT SAFETY NOTICE:

COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

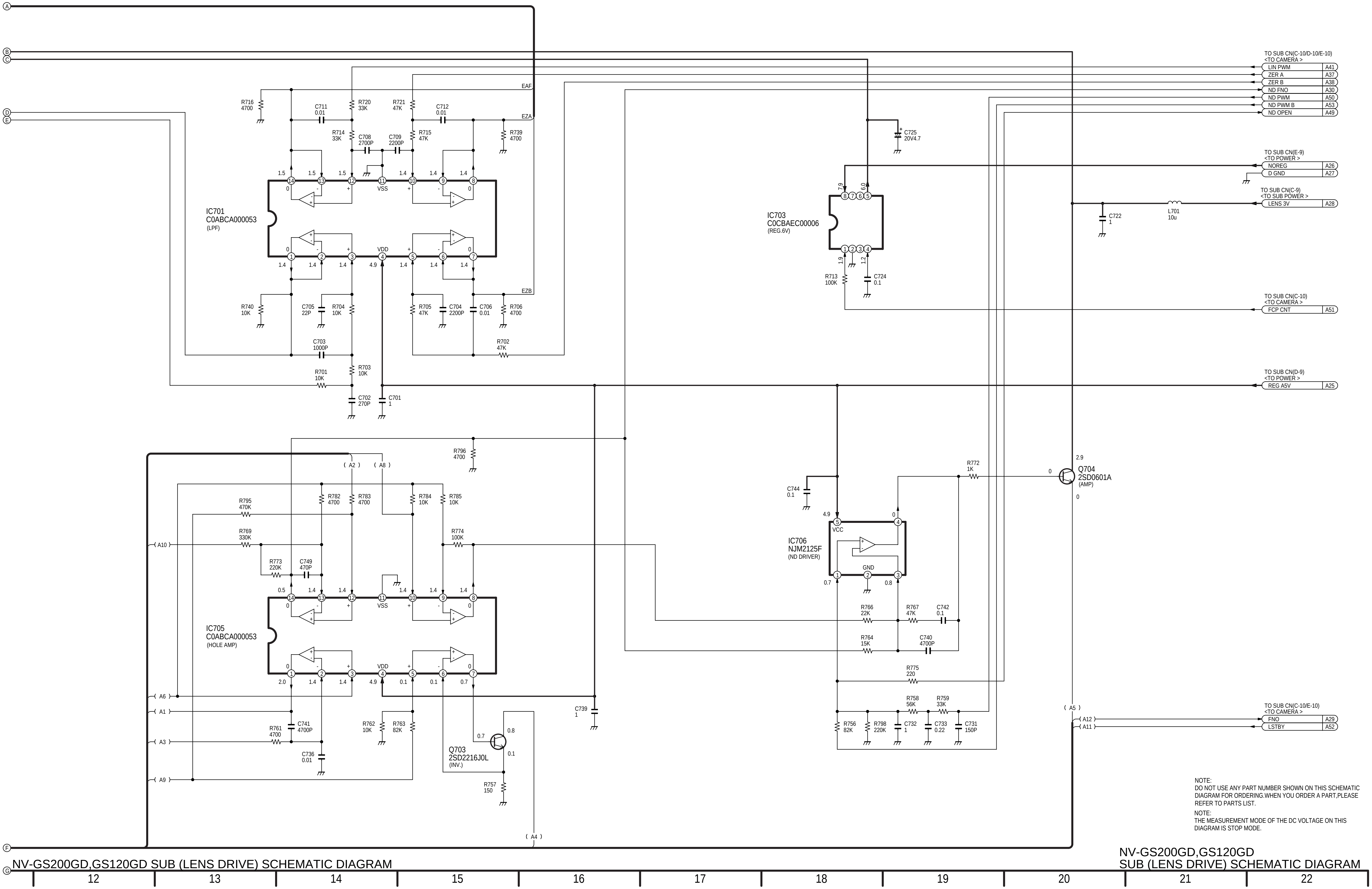

F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
IC602
X3002
PS3001
FP603
FP3401
FP6503
FP6504
IC3001
X3001
IC1321
L1011
L1021
L1031
L1041
IC2014
IC2015
IC2009
IC2012
IC2017
IC2006
Q3506
FP601
IC2201
T1051
FP1001
IC3201
FP2204
FP2202
FP6501
FP2201
L1062
L1061
PP3001
IP1001
(NV-GS200GD ONLY)
(NV-GS120GD ONLY)
MR01
MR02
MR03
MR04

(COMPONENT SIDE)

NV-GS200GD,GS120GD
MAIN C.B.A.(COMPONENT SIDE)


IC303
(DIGITAL SIGNAL PROCESSOR)
IC305
(CAMERA MICROCOMPUTER)
FROM SENSOR
G DATA
R DATA
B DATA
Y/C PROCESSOR
AF/ZOOM
PWM ND
PWM LIN
PWM IRIS
IRIS CLOSE
IRIS OPEN
FC A
FC B
F2 C
SIG
PWM HZA
PWM HZB
LENS 3V
Q704
Q703
IC706
IC705
IC701
IC702
(LENS DRIVE)
ND DRV(+)
ND DRV(-)
ND HIN(-)
ND HIN(+)
ND HO(-)
ND HO(+)
REF
NDHG
NDHB
ND FNO
EAF
H IN(-)
H IN(+)
H OUT(-)
H OUT(+)
ALC M(+)
ALC M(-)
FM T(+)
FM T(-)
FMR A
FMR B
H3O
H1O
H1-
H2+
IRM+
IRM-
FM+
FM-
A IN
B IN
IRIS DRIVE
FOCUS DRIVE
MOD
H5+
ICLOSE
IOPEN
FC A
FC B
F2 C
MA
MB
FM A
FM B
MIXO
LCI
LCMP
LENS UNIT
ENC
HALL SENSOR
MR
ND
IRIS
ZAN
ZAP
ZBN
ZBP
ZA-
ZA+
ZB-
ZB+
ZOOM DRIVE
EZA
EZB
Z ABS
Z LED
QR302
LED CONT
IC101
FCKO
OSC IN
SUB
FP701
ZOOM AD
AVREF
ZOOMAD
TO CONTROL
MAIN
SIDEL
FP6501
FP6301
FP6302
PP301
PS3001
ZOOM SW
ZOOM AD
GND
W
T
S6303
AUTO/MANUAL → FOCUS
IC2001
CAM RW
CAM CLK
VTR DATA
VTR DATA
CAM RTN
CAM SCK
CV DATA
VC DATA
DEW
PHOTO SHOT2
PHOTO SHOT1
CAM KEY1
S/S SW
STANDBY SW
POWER SW
STANDBY LED
POWER LED
QR2006
QR2005
+B
REAR-OP
MODE SW
TAPE RECORDING MODE
TAPE PLAYBACK MODE
CARD RECORDING MODE
PICTURE PLAYBACK MODE
M PEG4 PLAYBACK MODE
(NV-GS200GD ONLY)
PC MODE
FP6502
DEW
PHOTO 2
PHOTO 1
SW2
SW1
PHOTO SHOT
(NV-GS200GD ONLY)
CAM KEY 1
STANDBY LED
POWER LED
SS SW
STANDBY SW
POWER SW
QUICK STRAT
POWER LED
S/S SW
SHOE DET
SHOE SCK
SHOE SDI
SHOE SDO
SHOE ON
FP3402
IP1001
LB1001
Q451
QR451
HOT SHOE
(NV-GS200GD ONLY)
MF SENSOR
+5V
Q710
Q711
MF LED
MF RING1
MF RING2
QR301
IC306
FP4002
FP4801
FRONT
FP6501
MF LED
MF L1
MF L2

NV-GS200GD,GS120GD
LENS DRIVE BLOCK DIAGRAM


A
B
C
D
E
F
G
IC701
C0ABCA000053
(LPF)
R716 4700
C711 0.01
R720 33K
R721 47K
C712 0.01
EAF
EZA
EZB
R714 33K
C708 2700P
C709 2200P
R715 47K
R739 4700
VSS
VDD
R740 10K
C705 22P
R704 10K
R705 47K
C704 2200P
C706 0.01
R706 4700
C703 1000P
R702 47K
R703 10K
R701 10K
C702 270P
C701 1
TO SUB CN(C-10/D-10/E-10)
<TO CAMERA >
LIN PWM A41
ZER A A37
ZER B A38
ND FNO A30
ND PWM A50
ND PWM B A53
ND OPEN A49
C725 20V4.7
TO SUB CN(E-9)
<TO POWER >
NOREG A26
D GND A27
TO SUB CN(C-9)
<TO SUB POWER >
LENS 3V A28
C722 1
L701 10u
IC703
C0CBAEC00006
(REG.6V)
R713 100K
C724 0.1
TO SUB CN(C-10)
<TO CAMERA >
FCP CNT A51
TO SUB CN(D-9)
<TO POWER >
REG A5V A25
R796 4700
(A2)
(A8)
R795 470K
R782 4700
R783 4700
R784 10K
R785 10K
R769 330K
R774 100K
(A10)
R773 220K
C749 470P
IC705
C0ABCA000053
(HOLE AMP)
(A6)
(A1)
(A3)
(A9)
R761 4700
C741 4700P
C736 0.01
R762 10K
R763 82K
Q703
2SD2216J0L
(INV.)
R757 150
C739 1
(A4)
R772 1K
Q704
2SD0601A
(AMP)
C744 0.1
IC706
NJM2125F
(ND DRIVER)
VCC
GND
R766 22K
R767 47K
C742 0.1
R764 15K
C740 4700P
R775 220
R758 56K
R759 33K
R756 82K
R798 220K
C732 1
C733 0.22
C731 150P
(A5)
TO SUB CN(C-10/E-10)
<TO CAMERA >
(A12) FNO A29
(A11) LSTBY A52
12
13
14
15
16
17
18
19
20
21
22

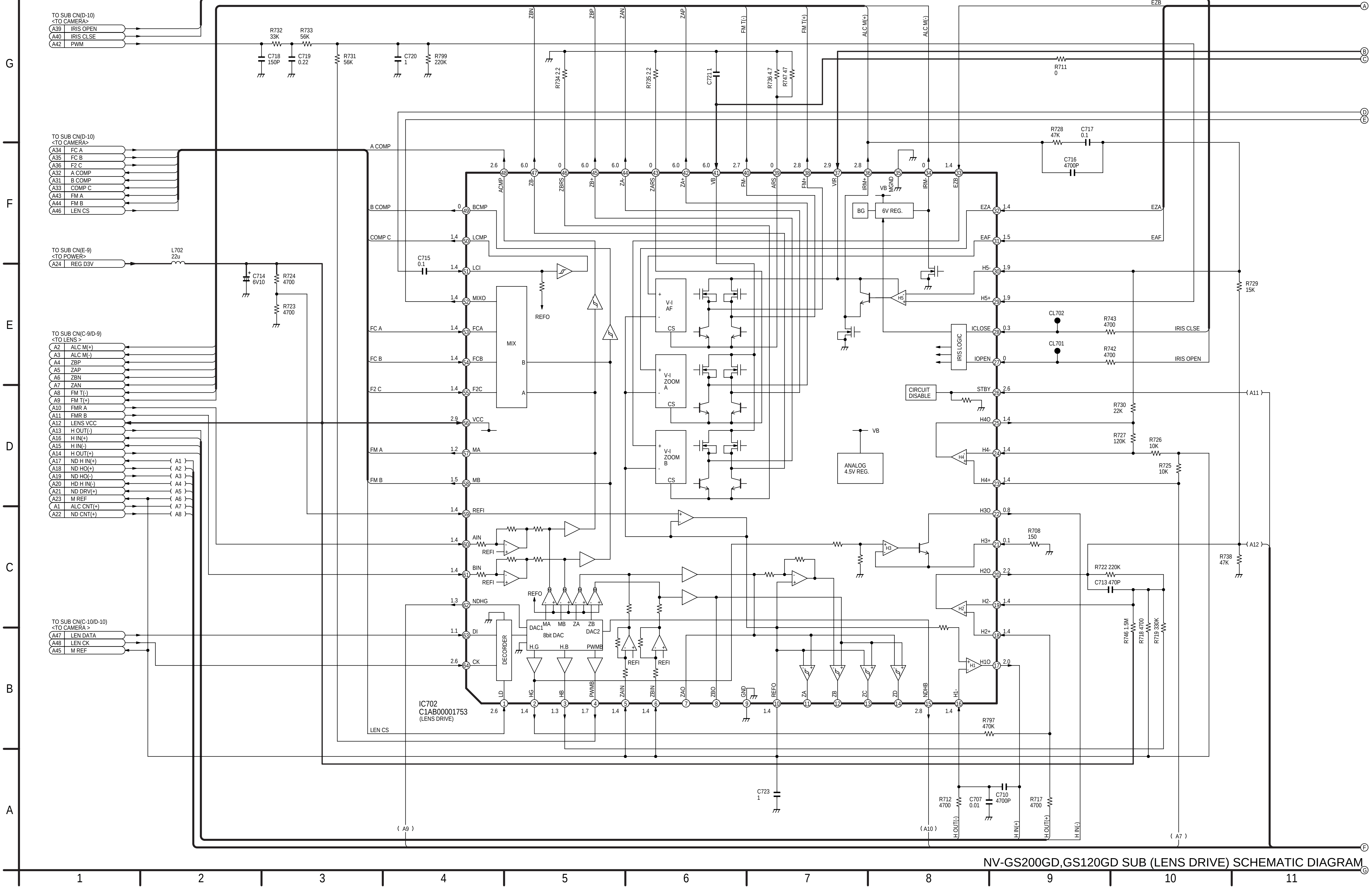
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-GS200GD,GS120GD SUB (LENS DRIVE) SCHEMATIC DIAGRAM

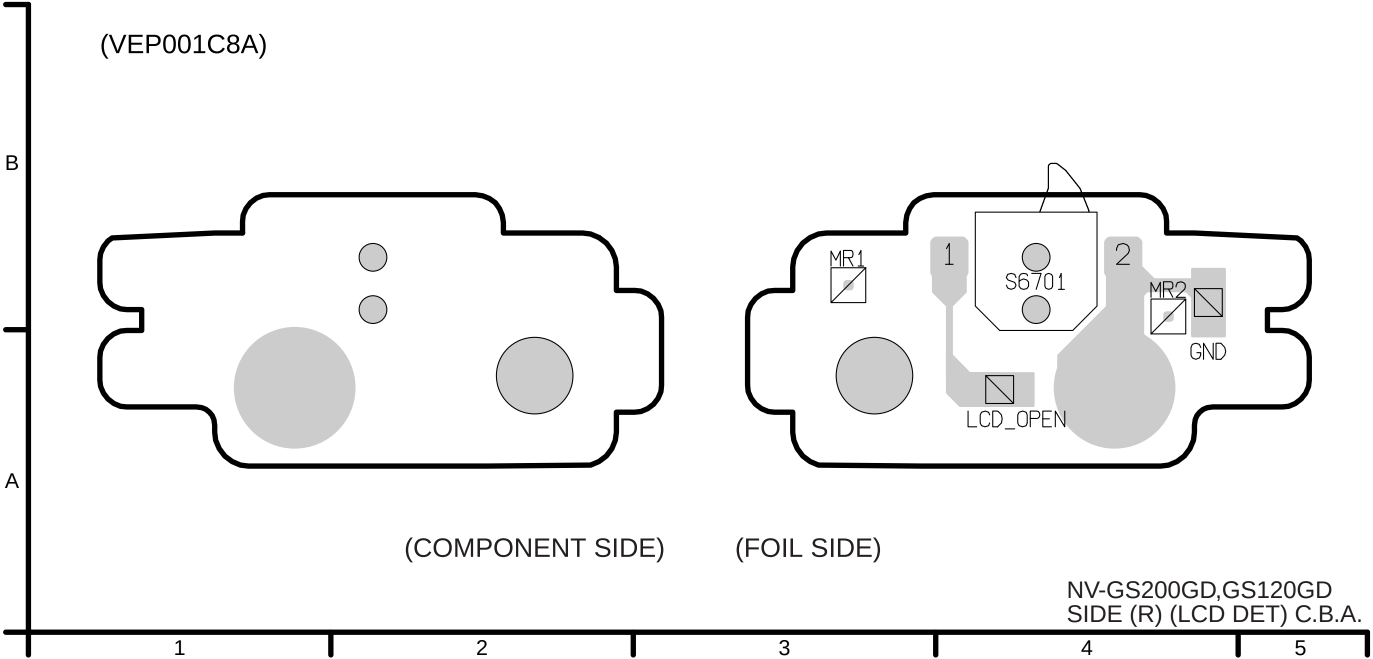
NV-GS200GD,GS120GD
SUB (LENS DRIVE) SCHEMATIC DIAGRAM

(SUB C.B.A.)
REFER TO SUB CONNECTION


TO SUB CN(D-10)
<TO CAMERA>
A39 IRIS OPEN
A40 IRIS CLSE
A42 PWM
TO SUB CN(D-10)
<TO CAMERA>
A34 FC A
A35 FC B
A36 F2 C
A32 A COMP
A31 B COMP
A33 COMP C
A43 FM A
A44 FM B
A46 LEN CS
TO SUB CN(E-9)
<TO POWER>
A24 REG D3V
TO SUB CN(C-9/D-9)
<TO LENS>
A2 ALC M(+)
A3 ALC M(-)
A4 ZBP
A5 ZAP
A6 ZBN
A7 ZAN
A8 FM T(-)
A9 FM T(+)
A10 FMR A
A11 FMR B
A12 LENS VCC
A13 H OUT(-)
A16 H IN(+)
A15 H IN(-)
A14 H OUT(+)
A17 ND H IN(+)
A18 ND HO(+)
A19 ND HO(-)
A20 HD H IN(-)
A21 ND DRV(+)
A23 M REF
A1 ALC CNT(+)
A22 ND CNT(+)
TO SUB CN(C-10/D-10)
<TO CAMERA>
A47 LEN DATA
A48 LEN CK
A45 M REF
R732 33K
R733 56K
C718 150P
C719 0.22
R731 56K
C720 1
R799 220K
R734 2.2
R735 2.2
C721 1
R736 4.7
R747 47
R711 0
R728 47K
C717 0.1
C716 4700P
L702 22u
C714 6V10
R724 4700
R723 4700
C715 0.1
REFO
ZBN
ZBP
ZAN
ZAP
FM T(-)
FM T(+)
ALC M(+)
ALC M(-)
EZB
A COMP
B COMP
COMP C
FC A
FC B
F2 C
FM A
FM B
LEN CS
ACMP
ZB-
ZBRS
ZB+
ZA-
ZARS
ZA+
VB
FM-
ARS
FM+
VIR
IRM+
MGND
IRM-
EZB
BCMP
LCMP
LCI
MIXO
FCA
FCB
F2C
VCC
MA
MB
REFI
AIN
BIN
NDHG
DI
CK
MIX
V-I AF
V-I ZOOM A
V-I ZOOM B
CS
BG
6V REG.
VB
IRIS LOGIC
CIRCUIT DISABLE
ANALOG 4.5V REG.
EZA
EAF
H5-
H5+
ICLOSE
IOPEN
STBY
H4O
H4-
H4+
H3O
H3+
H2O
H2-
H2+
H1O
H1-
CL702
CL701
R743 4700
R742 4700
IRIS CLSE
IRIS OPEN
R729 15K
R730 22K
R727 120K
R726 10K
R725 10K
R708 150
R738 47K
R722 220K
C713 470P
R746 1.5M
R718 4700
R719 330K
DAC1
DAC2
8bit DAC
MA MB ZA ZB
H.G H.B PWMB
DECORDER
REFI
LD HG HB PWMB ZAIN ZBIN ZAO ZBO GND REFO ZA ZB ZC ZD NDHB H1-
IC702
C1AB00001753
(LENS DRIVE)
R797 470K
C723 1
R712 4700
C707 0.01
C710 4700P
R717 4700
H OUT(-)
H IN(+)
H OUT(+)
H IN(-)
A9
A10
A7
A11
A12
A
B
C
D
E
F
G
1 2 3 4 5 6 7 8 9 10 11

NV-GS200GD,GS120GD SUB (LENS DRIVE) SCHEMATIC DIAGRAM

(VEP001C8A)

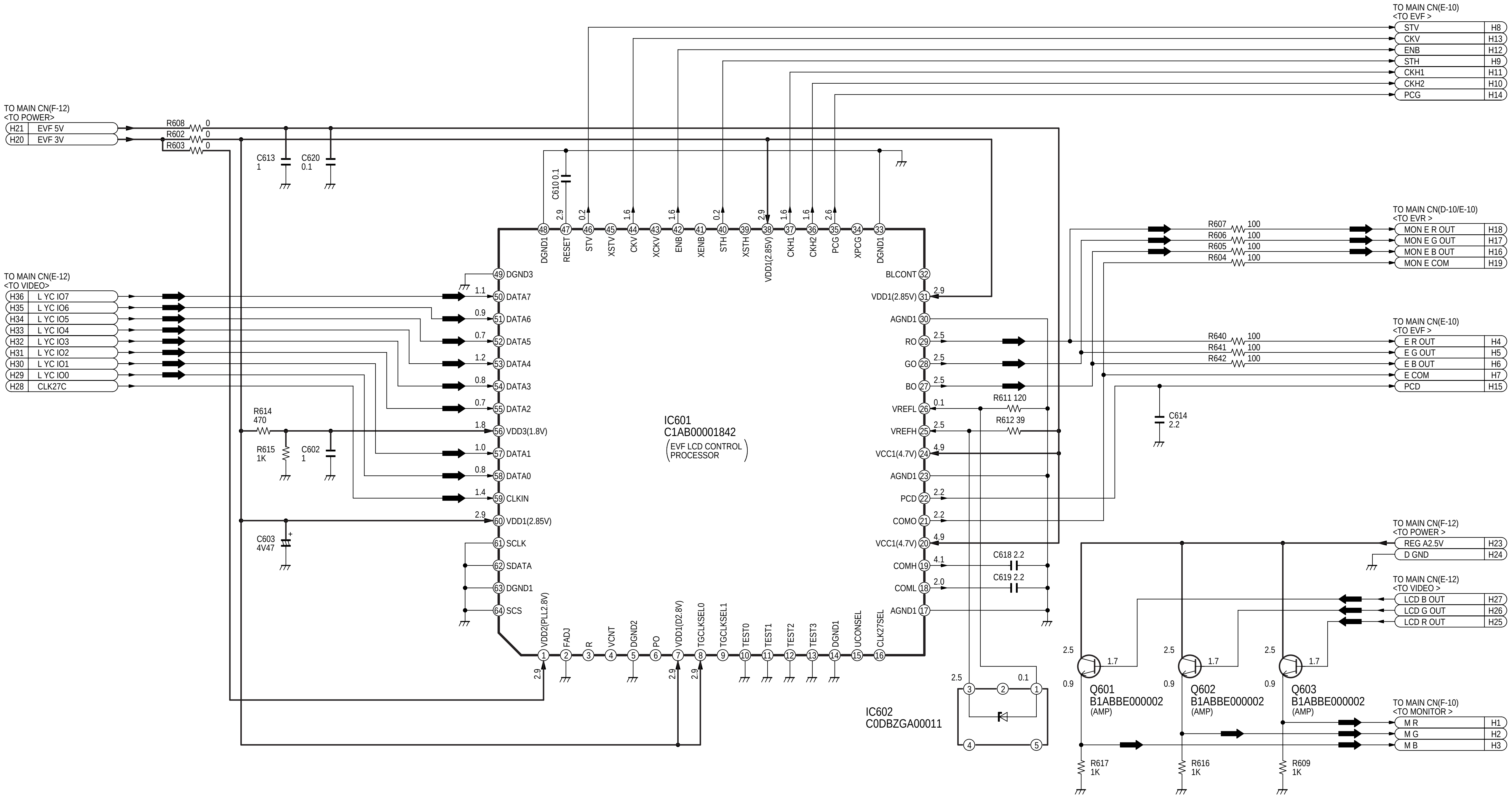

B
A
1
2
3
4
5
MR1
1
S6701
2
MR2
GND
LCD_OPEN

(COMPONENT SIDE) (FOIL SIDE)

NV-GS200GD,GS120GD
SIDE (R) (LCD DET) C.B.A.

(MAIN C.B.A.)
REFER TO MAIN CONNECTION

➡ :VIDEO MAIN SIGNAL PATH


TO MAIN CN(F-12)
<TO POWER>
H21 EVF 5V
H20 EVF 3V
R608 0
R602 0
R603 0
C613 1
C620 0.1
C610 0.1
TO MAIN CN(E-12)
<TO VIDEO>
H36 L YC IO7
H35 L YC IO6
H34 L YC IO5
H33 L YC IO4
H32 L YC IO3
H31 L YC IO2
H30 L YC IO1
H29 L YC IO0
H28 CLK27C
R614 470
R615 1K
C602 1
C603 4V47
48 DGND1
47 RESET
46 STV
45 XSTV
44 CKV
43 XCKV
42 ENB
41 XENB
40 STH
39 XSTH
38 VDD1(2.85V)
37 CKH1
36 CKH2
35 PCG
34 XPCG
33 DGND1
49 DGND3
50 DATA7
51 DATA6
52 DATA5
53 DATA4
54 DATA3
55 DATA2
56 VDD3(1.8V)
57 DATA1
58 DATA0
59 CLKIN
60 VDD1(2.85V)
61 SCLK
62 SDATA
63 DGND1
64 SCS
1 VDD2(PLL2.8V)
2 FADJ
3 R
4 VCNT
5 DGND2
6 PO
7 VDD1(D2.8V)
8 TGCLKSEL0
9 TGCLKSEL1
10 TEST0
11 TEST1
12 TEST2
13 TEST3
14 DGND1
15 UCONSEL
16 CLK27SEL
32 BLCONT
31 VDD1(2.85V)
30 AGND1
29 RO
28 GO
27 BO
26 VREFL
25 VREFH
24 VCC1(4.7V)
23 AGND1
22 PCD
21 COMO
20 VCC1(4.7V)
19 COMH
18 COML
17 AGND1
IC601
C1AB00001842
(EVF LCD CONTROL PROCESSOR)
2.9 0.2 1.6 1.6 0.2 2.9 1.6 1.6 2.6
1.1 0.9 0.7 1.2 0.8 0.7 1.8 1.0 0.8 1.4 2.9
2.9 2.9 2.9
2.9 2.5 2.5 2.5 0.1 2.5 4.9 2.2 2.2 4.9 4.1 2.0
R611 120
R612 39
C618 2.2
C619 2.2
C614 2.2
IC602
C0DBZGA00011
2.5 0.1
TO MAIN CN(E-10)
<TO EVF >
STV H8
CKV H13
ENB H12
STH H9
CKH1 H11
CKH2 H10
PCG H14
TO MAIN CN(D-10/E-10)
<TO EVR >
R607 100
R606 100
R605 100
R604 100
MON E R OUT H18
MON E G OUT H17
MON E B OUT H16
MON E COM H19
TO MAIN CN(E-10)
<TO EVF >
R640 100
R641 100
R642 100
E R OUT H4
E G OUT H5
E B OUT H6
E COM H7
PCD H15
TO MAIN CN(F-12)
<TO POWER >
REG A2.5V H23
D GND H24
TO MAIN CN(E-12)
<TO VIDEO >
LCD B OUT H27
LCD G OUT H26
LCD R OUT H25
2.5 1.7 0.9
Q601
B1ABBE000002
(AMP)
Q602
B1ABBE000002
(AMP)
Q603
B1ABBE000002
(AMP)
TO MAIN CN(F-10)
<TO MONITOR >
M R H1
M G H2
M B H3
R617 1K
R616 1K
R609 1K

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

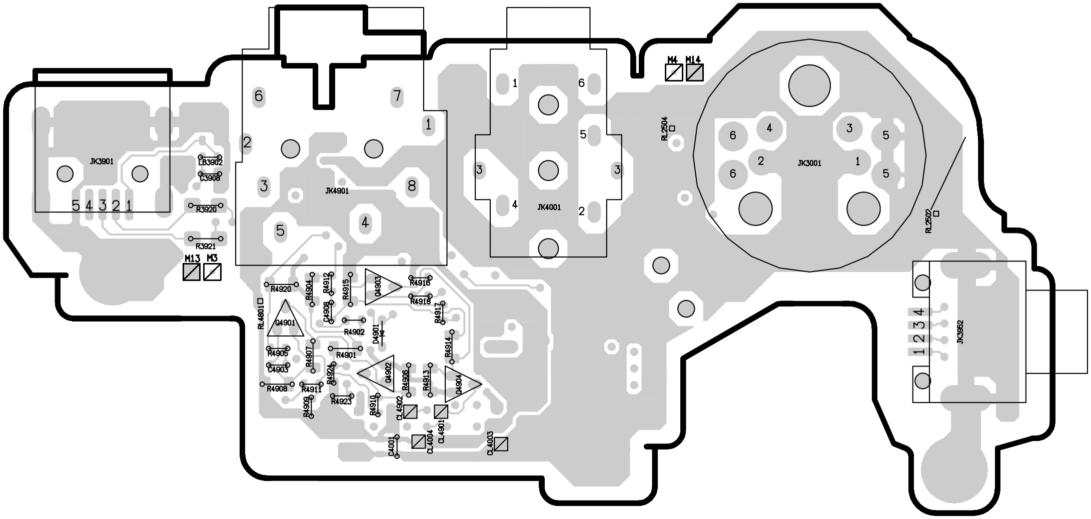
NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.(EVF:ON)

NV-GS200GD,GS120GD
MAIN (LCD) SCHEMATIC DIAGRAM

(VEP001C6A)

E

D

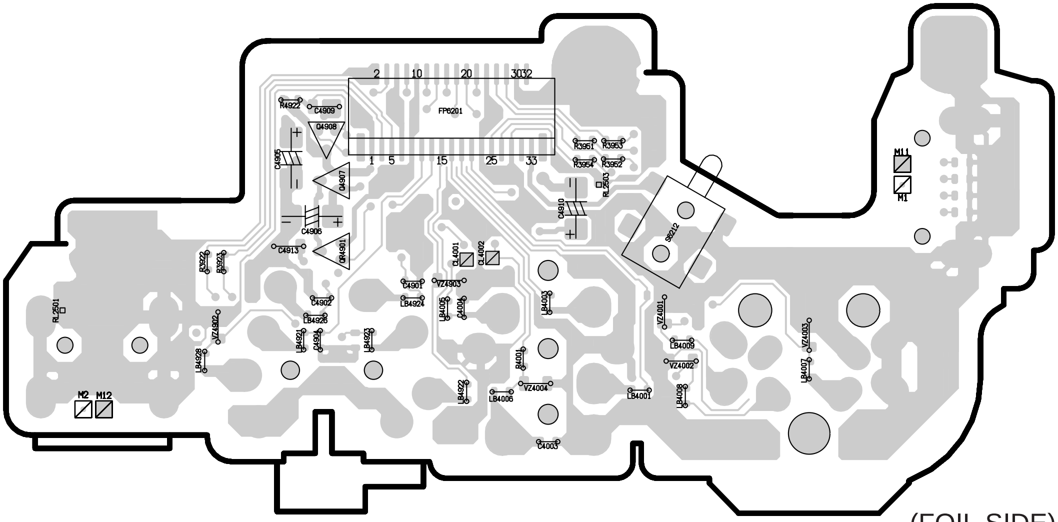


JK3901
5 4 3 2 1
LB3902
C3908
R3920
R3921
M13
M3
JK4901
6
7
1
2
3
8
5
4
JK4001
1
6
5
3
3
4
2
RL2504
M4
M14
JK3001
6
4
3
5
6
2
1
5
RL2502
JK3952
1 2 3 4
RL4801
R4920
R4904
R4912
R4915
Q4903
R4916
R4918
Q4901
C4908
R4902
D4901
R4917
R4905
C4903
R4907
R4901
R4914
Q4902
R4924
R4906
R4913
Q4904
R4908
R4911
R4923
R4909
R4910
CL4902
CL4901
C4001
CL4004
CL4003

C

(COMPONENT SIDE)

B



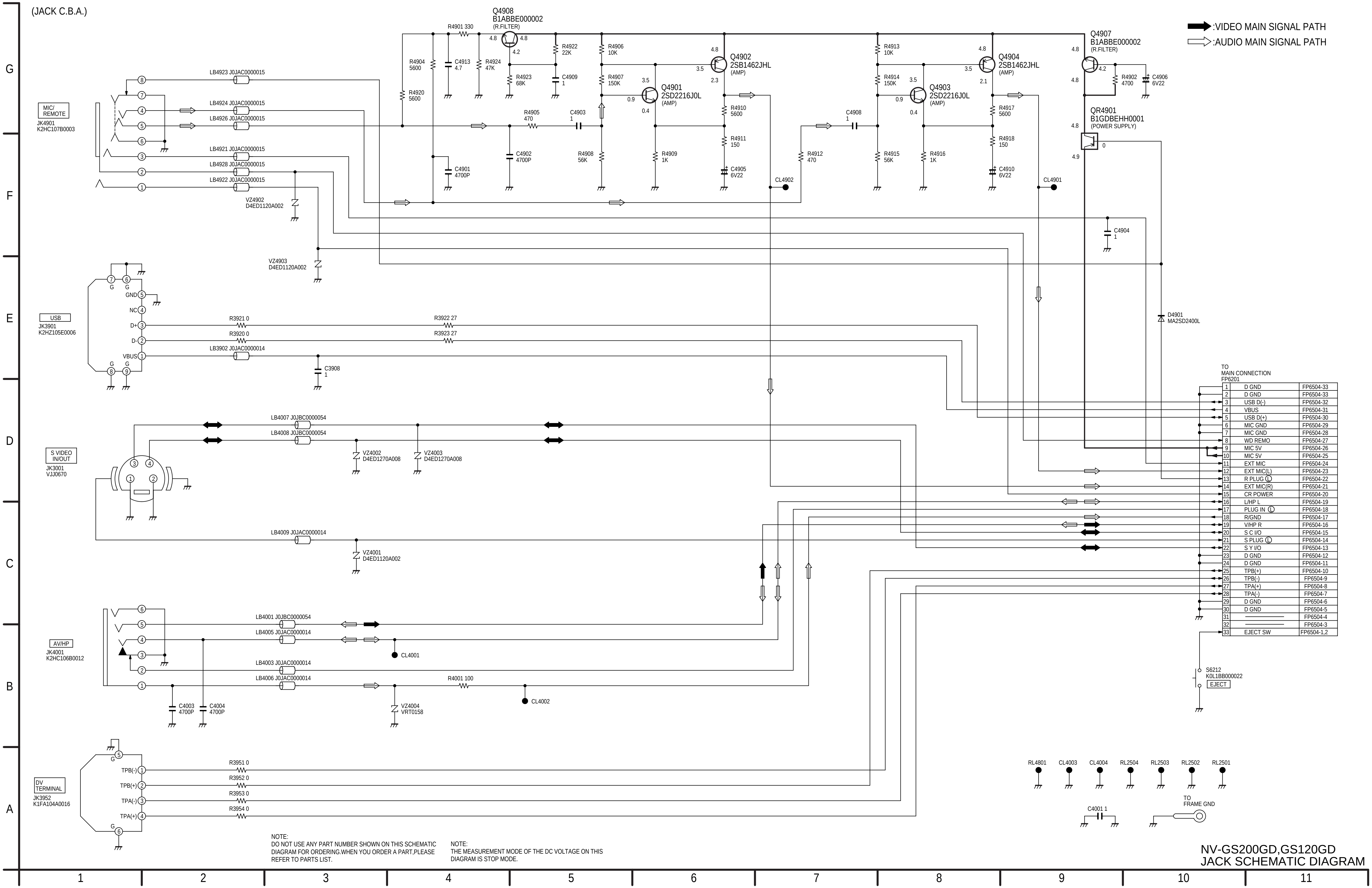
2
10
20
30
32
FP6201
1
5
15
25
33
R4922
C4909
Q4908
C4905
Q4907
C4906
C4913
QR4901
R3922
R3923
RL2501
VZ4902
LB4928
C4902
LB4926
LB4921
C4904
LB4923
C4901
LB4924
VZ4903
LB4005
C4004
CL4001
CL4002
LB4003
R4001
LB4922
LB4006
VZ4004
C4003
C4910
R3951
R3953
R3954
R3952
RL2503
SS2212
VZ4001
LB4009
VZ4002
LB4008
LB4001
VZ4003
LB4007
M11
M1
M2
M12

A

(FOIL SIDE)

NV-GS200GD,GS120GD
JACK C.B.A.

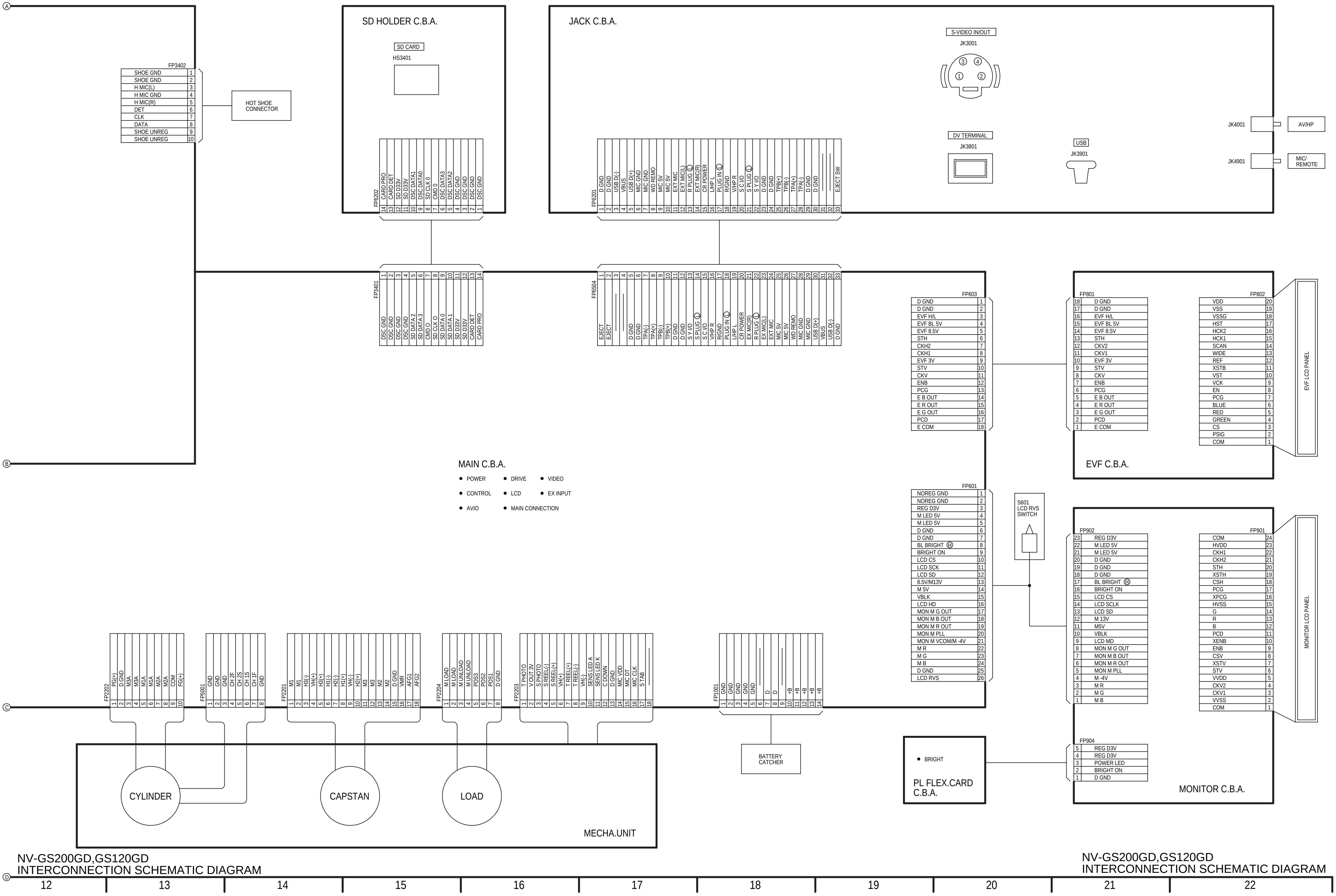
1
2
3
4
5


(JACK C.B.A.)
:VIDEO MAIN SIGNAL PATH
:AUDIO MAIN SIGNAL PATH
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
MIC/ REMOTE
JK4901
K2HC107B0003
LB4923 J0JAC0000015
LB4924 J0JAC0000015
LB4926 J0JAC0000015
LB4921 J0JAC0000015
LB4928 J0JAC0000015
LB4922 J0JAC0000015
VZ4902
D4ED1120A002
VZ4903
D4ED1120A002
Q4908
B1ABBE000002
(R.FILTER)
R4901 330
R4904
5600
R4920
5600
C4913
4.7
R4924
47K
R4923
68K
R4922
22K
C4909
1
C4901
4700P
C4902
4700P
R4905
470
C4903
1
R4906
10K
R4907
150K
R4908
56K
Q4901
2SD2216J0L
(AMP)
R4909
1K
Q4902
2SB1462JHL
(AMP)
R4910
5600
R4911
150
C4905
6V22
CL4902
R4912
470
C4908
1
R4913
10K
R4914
150K
R4915
56K
Q4903
2SD2216J0L
(AMP)
R4916
1K
Q4904
2SB1462JHL
(AMP)
R4917
5600
R4918
150
C4910
6V22
CL4901
Q4907
B1ABBE000002
(R.FILTER)
R4902
4700
C4906
6V22
QR4901
B1GDBEHH0001
(POWER SUPPLY)
C4904
1
D4901
MA2SD2400L
USB
JK3901
K2HZ105E0006
GND
NC
D+
D-
VBUS
R3921 0
R3920 0
R3922 27
R3923 27
LB3902 J0JAC0000014
C3908
1
S VIDEO IN/OUT
JK3001
VJJ0670
LB4007 J0JBC0000054
LB4008 J0JBC0000054
VZ4002
D4ED1270A008
VZ4003
D4ED1270A008
LB4009 J0JAC0000014
VZ4001
D4ED1120A002
AV/HP
JK4001
K2HC106B0012
LB4001 J0JBC0000054
LB4005 J0JAC0000014
LB4003 J0JAC0000014
LB4006 J0JAC0000014
CL4001
R4001 100
CL4002
C4003
4700P
C4004
4700P
VZ4004
VRT0158
DV TERMINAL
JK3952
K1FA104A0016
TPB(-)
TPB(+)
TPA(-)
TPA(+)
R3951 0
R3952 0
R3953 0
R3954 0
TO
MAIN CONNECTION
FP6201
1 D GND FP6504-33
2 D GND FP6504-33
3 USB D(-) FP6504-32
4 VBUS FP6504-31
5 USB D(+) FP6504-30
6 MIC GND FP6504-29
7 MIC GND FP6504-28
8 WD REMO FP6504-27
9 MIC 5V FP6504-26
10 MIC 5V FP6504-25
11 EXT MIC FP6504-24
12 EXT MIC(L) FP6504-23
13 R PLUG Ⓛ FP6504-22
14 EXT MIC(R) FP6504-21
15 CR POWER FP6504-20
16 L/HP L FP6504-19
17 PLUG IN Ⓛ FP6504-18
18 R/GND FP6504-17
19 V/HP R FP6504-16
20 S C I/O FP6504-15
21 S PLUG Ⓛ FP6504-14
22 S Y I/O FP6504-13
23 D GND FP6504-12
24 D GND FP6504-11
25 TPB(+) FP6504-10
26 TPB(-) FP6504-9
27 TPA(+) FP6504-8
28 TPA(-) FP6504-7
29 D GND FP6504-6
30 D GND FP6504-5
31 FP6504-4
32 FP6504-3
33 EJECT SW FP6504-1,2
S6212
K0L1BB000022
EJECT
RL4801
CL4003
CL4004
RL2504
RL2503
RL2502
RL2501
C4001 1
TO
FRAME GND

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-GS200GD,GS120GD
JACK SCHEMATIC DIAGRAM


A
B
C
D
FP3402
1 SHOE GND
2 SHOE GND
3 H MIC(L)
4 H MIC GND
5 H MIC(R)
6 DET
7 CLK
8 DATA
9 SHOE UNREG
10 SHOE UNREG
HOT SHOE CONNECTOR
SD HOLDER C.B.A.
SD CARD
HS3401
FP6202
14 CARD PRO
13 CARD DET
12 SD D33V
11 SD D33V
10 DSC DATA1
9 DSC DATA0
8 SD CLK 0
7 CMD 0
6 DSC DATA3
5 DSC DATA2
4 DSC GND
3 DSC GND
2 DSC GND
1 DSC GND
JACK C.B.A.
S-VIDEO IN/OUT
JK3001
③ ④
① ②
DV TERMINAL
JK3801
USB
JK3901
JK4001
AV/HP
JK4901
MIC/ REMOTE
FP6201
1 D GND
2 D GND
3 USB D(-)
4 VBUS
5 USB D(+)
6 MIC GND
7 MIC GND
8 WD REMO
9 MIC 5V
10 MIC 5V
11 EXT MIC
12 EXT MIC(L)
13 R PLUG Ⓛ
14 EXT MIC(R)
15 CR POWER
16 L/HP L
17 PLUG IN Ⓛ
18 R/GND
19 V/HP R
20 S C I/O
21 S PLUG Ⓛ
22 S Y I/O
23 D GND
24 D GND
25 TPB(+)
26 TPB(-)
27 TPA(+)
28 TPA(-)
29 D GND
30 D GND
31
32
33 EJECT SW
FP3401
1 DSC GND
2 DSC GND
3 DSC GND
4 DSC GND
5 SD DATA 2
6 SD DATA 3
7 CMD O
8 SD CLK O
9 SD DATA 0
10 SD DATA 1
11 SD D33V
12 SD D33V
13 CARD DET
14 CARD PRO
FP6504
1 EJECT
2 EJECT
3
4
5 D GND
6 D GND
7 TPA(-)
8 TPA(+)
9 TPB(-)
10 TPB(+)
11 D GND
12 D GND
13 S Y I/O
14 S PLUG Ⓛ
15 S C I/O
16 V/HP R
17 R/GND
18 PLUG IN Ⓛ
19 L/HP L
20 CR POWER
21 EX MIC(R)
22 R PLUG Ⓛ
23 EX MIC(L)
24 EXT MIC
25 MIC 5V
26 MIC 5V
27 WD REMO
28 MIC GND
29 MIC GND
30 USB D(+)
31 VBUS
32 USB D(-)
33 D GND
FP603
D GND 1
D GND 2
EVF H/L 3
EVF BL 5V 4
EVF 8.5V 5
STH 6
CKH2 7
CKH1 8
EVF 3V 9
STV 10
CKV 11
ENB 12
PCG 13
E B OUT 14
E R OUT 15
E G OUT 16
PCD 17
E COM 18
FP801
18 D GND
17 D GND
16 EVF H/L
15 EVF BL 5V
14 EVF 8.5V
13 STH
12 CKV2
11 CKV1
10 EVF 3V
9 STV
8 CKV
7 ENB
6 PCG
5 E B OUT
4 E R OUT
3 E G OUT
2 PCD
1 E COM
FP802
VDD 20
VSS 19
VSSG 18
HST 17
HCK2 16
HCK1 15
SCAN 14
WIDE 13
REF 12
XSTB 11
VST 10
VCK 9
EN 8
PCG 7
BLUE 6
RED 5
GREEN 4
CS 3
PSIG 2
COM 1
EVF LCD PANEL
EVF C.B.A.
MAIN C.B.A.
● POWER
● DRIVE
● VIDEO
● CONTROL
● LCD
● EX INPUT
● AVIO
● MAIN CONNECTION
FP601
NOREG GND 1
NOREG GND 2
REG D3V 3
M LED 5V 4
M LED 5V 5
D GND 6
D GND 7
BL BRIGHT Ⓗ 8
BRIGHT ON 9
LCD CS 10
LCD SCK 11
LCD SD 12
8.5V/M13V 13
M 5V 14
VBLK 15
LCD HD 16
MON M G OUT 17
MON M B OUT 18
MON M R OUT 19
MON M PLL 20
MON M VCOM/M -4V 21
M R 22
M G 23
M B 24
D GND 25
LCD RVS 26
S601 LCD RVS SWITCH
FP902
23 REG D3V
22 M LED 5V
21 M LED 5V
20 D GND
19 D GND
18 D GND
17 BL BRIGHT Ⓗ
16 BRIGHT ON
15 LCD CS
14 LCD SCLK
13 LCD SD
12 M 13V
11 M5V
10 VBLK
9 LCD MD
8 MON M G OUT
7 MON M B OUT
6 MON M R OUT
5 MON M PLL
4 M -4V
3 M R
2 M G
1 M B
FP901
COM 24
HVDD 23
CKH1 22
CKH2 21
STH 20
XSTH 19
CSH 18
PCG 17
XPCG 16
HVSS 15
G 14
R 13
B 12
PCD 11
XENB 10
ENB 9
CSV 8
XSTV 7
STV 6
VVDD 5
CKV2 4
CKV1 3
VVSS 2
COM 1
MONITOR LCD PANEL
FP904
5 REG D3V
4 REG D3V
3 POWER LED
2 BRIGHT ON
1 D GND
MONITOR C.B.A.
● BRIGHT
PL FLEX.CARD C.B.A.
FP2202
1 PG(+)
2 D GND
3 M3A
4 M3A
5 M1A
6 M1A
7 M2A
8 M2A
9 COM
10 FG(+)
FP5001
1 GND
2 GND
3 GND
4 CH 2F
5 CH 2S
6 CH 1S
7 CH 1F
8 GND
FP2201
1 M1
2 M1
3 H3(-)
4 VH(+)
5 H3(+)
6 H1(-)
7 H2(-)
8 H1(+)
9 VH(-)
10 H2(+)
11 M3
12 M3
13 M2
14 M2
15 D GND
16 VMR
17 AFG1
18 AFG2
FP2204
1 M LOAD
2 M LOAD
3 M UNLOAD
4 M UNLOAD
5 POS3
6 POS2
7 POS1
8 D GND
FP2203
1 T PHOTO
2 V OUT 3V
3 S PHOTO
4 S REEL(-)
5 S REEL(+)
6 VH(+)
7 T REEL(+)
8 T REEL(-)
9 VH(-)
10 SENS LED A
11 SENS LED K
12 C DOWN
13 D GND
14 MIC VDD
15 MIC DT
16 MIC CLK
17 S TAB
18
FP1001
1 GND
2 GND
3 GND
4 GND
5 GND
6
7 D
8 D
9
10 +B
11 +B
12 +B
13 +B
14 +B
BATTERY CATCHER
CYLINDER
CAPSTAN
LOAD
MECHA.UNIT
12
13
14
15
16
17
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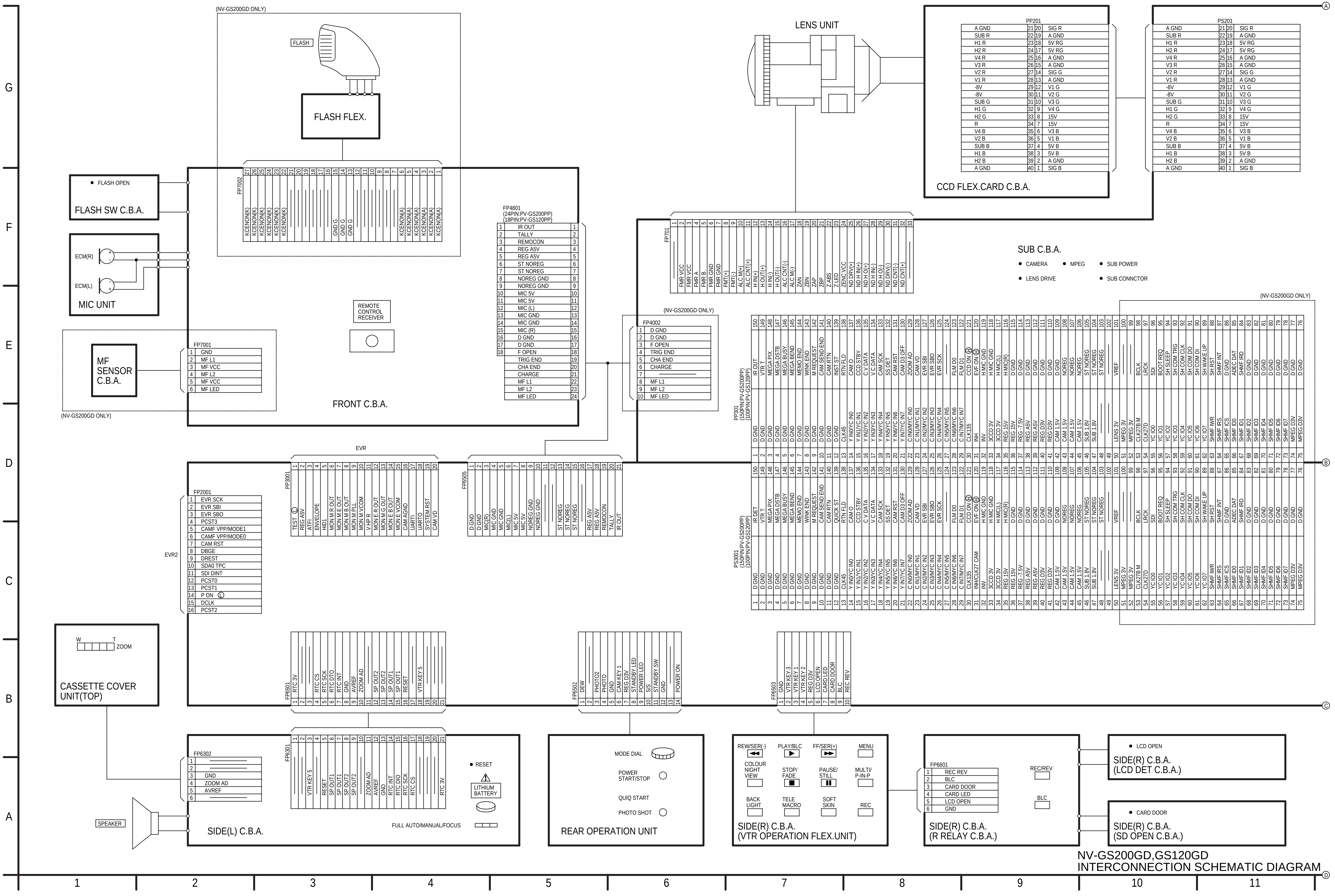
22

NV-GS200GD,GS120GD
INTERCONNECTION SCHEMATIC DIAGRAM

NV-GS200GD,GS120GD
INTERCONNECTION SCHEMATIC DIAGRAM


G
F
E
D
C
B
A
1
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3
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6
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11
(NV-GS200GD ONLY)
FLASH
FLASH FLEX.
FP7002
FLASH OPEN
FLASH SW C.B.A.
ECM(R)
ECM(L)
MIC UNIT
MF SENSOR C.B.A.
FP7001
(NV-GS200GD ONLY)
FP4801 (24PIN:PV-GS200PP) (18PIN:PV-GS120PP)
REMOTE CONTROL RECEIVER
FRONT C.B.A.
FP4002
LENS UNIT
PP201
PS201
CCD FLEX.CARD C.B.A.
FP701
SUB C.B.A.
CAMERA
MPEG
SUB POWER
LENS DRIVE
SUB CONNCTOR
PP301 (150PIN:PV-GS200PP) (100PIN:PV-GS120PP)
PS3001 (150PIN:PV-GS200PP) (100PIN:PV-GS120PP)
EVR
FP3001
FP6505
FP2001
EVR2
W
T
ZOOM
CASSETTE COVER UNIT(TOP)
FP6501
FP6502
FP6503
FP6302
FP6301
SPEAKER
RESET
LITHIUM BATTERY
FULL AUTO/MANUAL/FOCUS
SIDE(L) C.B.A.
MODE DIAL
POWER START/STOP
QUIQ START
PHOTO SHOT
REAR OPERATION UNIT
REW/SER(-)
PLAY/BLC
FF/SER(+)
MENU
COLOUR NIGHT VIEW
STOP/ FADE
PAUSE/ STILL
MULTI/ P-IN-P
BACK LIGHT
TELE MACRO
SOFT SKIN
REC
SIDE(R) C.B.A. (VTR OPERATION FLEX.UNIT)
FP6601
REC/REV
BLC
SIDE(R) C.B.A. (R RELAY C.B.A.)
LCD OPEN
SIDE(R) C.B.A. (LCD DET C.B.A.)
CARD DOOR
SIDE(R) C.B.A. (SD OPEN C.B.A.)
A
B
C
D

NV-GS200GD,GS120GD
INTERCONNECTION SCHEMATIC DIAGRAM

Check Point of the IC3501

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
121	Y O O (7)	—	—	—	
122	OUT SEL	—	—	—	
123	SEL 1	—	—	—	
124	VSS	—	—	—	
125	CAM Y (0)	—	—	—	
126	CAM Y (1)	—	—	—	
127	CAM Y (2)	—	—	—	
128	CAM Y (3)	—	—	—	
129	VDD	—	—	—	
130	VDD	—	—	—	
131	VDD	—	—	—	
132	VSS	—	—	—	
133	VSS	—	—	—	
134	VSS	—	—	—	
135	CAM Y (4)	—	—	—	
136	VDD	—	—	—	
137	CAM Y (5)	—	—	—	
138	VDD	—	—	—	
139	CAM INH	—	—	—	
140	CAM INV	—	—	—	
141	VSS	—	—	—	
142	VDD	—	—	—	
143	CAM C (0)	—	—	—	
144	VSS	—	—	—	
145	VSS	—	—	—	
146	CLK 135M	—	—	—	
147	VDD	—	—	—	
148	VDD	—	—	—	
149	VDD	—	—	—	
150	CAM C (1)	—	—	—	
151	CAM C (2)	—	—	—	
152	CAM C (3)	—	—	—	
153	CAM C (4)	—	—	—	
154	VSS	—	—	—	
155	CAM C (5)	—	—	—	
156	VSS	—	—	—	
157	CAM C (6)	—	—	—	
158	CAM C (7)	—	—	—	
159	VSS	—	—	—	
160	VSS	—	—	—	
161	CAM Y (6)	—	—	—	
162	CAM Y (7)	—	—	—	
163	CAM Y (8)	—	—	—	
164	CAM Y (9)	—	—	—	
165	VDD	—	—	—	
166	ALL HIZ N	—	—	—	
167	NANDTREE 1	—	—	—	
168	NANDTREE 2	—	—	—	
169	VSS	—	—	—	
170	VSS	—	—	—	
171	MONI 0 (7)	—	—	—	
172	MONI 0 (8)	—	—	—	
173	MONI 0 (9)	—	—	—	
174	VSS	—	—	—	
175	VSS	—	—	—	
176	VSS	—	—	—	

(C): COMPONENT SIDE (F): FOIL SIDE

Check Point of the IC3501

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
1	VDD	———	—	—	
2	VDD	———	—	—	
3	VDD	———	—	—	
4	MONI 0 (6)	———	—	—	
5	MONI 0 (5)	———	—	—	
6	AVDD 2.5	———	—	—	
7	AVSS	———	—	—	
8	AVBB	———	—	—	
9	Y AINT	Q3503-1	C-5	WF-1	MAIN C.B.A. (F)
10	Y AINC	C3523 (LEFT)	D-5	WF-1	MAIN C.B.A. (F)
11	Y REFBOT	IC3502-1	D-4	WF-1	MAIN C.B.A. (F)
12	Y CML	C3509 (LOWER)	D-4	WF-1	MAIN C.B.A. (F)
13	Y REFTOP	IC3502-7	D-4	WF-1	MAIN C.B.A. (F)
14	Y ITEST	C3510 (LOWER)	D-4	WF-1	MAIN C.B.A. (F)
15	Y STBY	———	—	—	
16	Y SPEEDUP	———	—	—	
17	VCD2	———	—	—	
18	DVSS	———	—	—	
19	AVBB	———	—	—	
20	DVDD2.5	———	—	—	
21	Y EOC	———	—	—	
22	Y STC	———	—	—	
23	C STC	———	—	—	
24	C EOC	———	—	—	
25	DVDD2.5	———	—	—	
26	DVSS	———	—	—	
27	AVBB	———	—	—	
28	VDD2	———	—	—	
29	C SPEEDUP	———	—	—	
30	C STBY	———	—	—	
31	C ITEST	C3512 (UPPER)		WF-1	MAIN C.B.A. (F)
32	C REFTOP	IC3502-7		WF-1	MAIN C.B.A. (F)
33	C CML	C3513 (LOWER)		WF-1	MAIN C.B.A. (F)
34	C REFBOT	IC3502-1		WF-1	MAIN C.B.A. (F)
35	C AINC	C3523 (LEFT)		WF-1	MAIN C.B.A. (F)
36	C AINT	C3569 (LEFT)		WF-1	MAIN C.B.A. (F)
37	AVBB	———	—	—	
38	AVSS	———	—	—	
39	AVDD2.5	———	—	—	
40	MONI 0 (4)	———	—	—	
41	MONI 0 (3)	———	—	—	
42	VSS	———	—	—	
43	VSS	———	—	—	
44	VSS	———	—	—	
45	VDD	———	—	—	
46	VDD	———	—	—	
47	VDD	———	—	—	
48	MONI 0 (2)	———	—	—	
49	MONI 0 (1)	———	—	—	
50	VDD	———	—	—	
51	MONI 0 (0)	———	—	—	
52	VSS	———	—	—	
53	VDD	———	—	—	
54	FS MODE	———	—	—	
55	INF I	———	—	—	
56	CLK 135P	———	—	—	
57	FS ENBL	———	—	—	
58	VDD	———	—	—	
59	CLK27M	———	—	—	
60	VDDC	———	—	—	
61	YC STP	———	—	—	
62	VSS	———	—	—	
63	YC SDA	IC3301-12	E-4	WF-1	MAIN C.B.A. (F)
64	VSS	———	—	—	
65	NOSYNC	RX2006-5	D-8	WF-1	MAIN C.B.A. (F)
66	YC SCK	IC3301-15	E-4	WF-1	MAIN C.B.A. (F)
67	LSI RESET	R3501 (LEFT)	B-3	WF-1	MAIN C.B.A. (F)
68	PS	———	—	—	
69	VDDC	———	—	—	
70	CLK27P	———	—	—	
71	135SEL	———	—	—	
72	MONI SEL I (5)	———	—	—	
73	MONI SEL I (4)	———	—	—	
74	MONI SEL I (3)	———	—	—	
75	MONI SEL I (2)	———	—	—	
76	MONI SEL I (1)	———	—	—	
77	MONI SEL I (0)	———	—	—	
78	TMS	R3071 (RIGHT)	B-4	WF-1	MAIN C.B.A. (F)
79	TCK	R3072 (LOWER)	B-3	WF-1	MAIN C.B.A. (F)
80	VSS	———	—	—	
81	TRST	R3501 (RIGHT)	B-3	WF-1	MAIN C.B.A. (F)
82	TDI	———	—	—	
83	TDO	———	—	—	
84	P M SEL	———	—	—	
85	CAM IN SEL	———	—	—	
86	VSS	———	—	—	
87	VSS	———	—	—	
88	VSS	———	—	—	
89	VDD	———	—	—	
90	VDD	———	—	—	
91	VDD	———	—	—	
92	VDD	———	—	—	
93	VIDEO S I	R3568 (LOWER)	C-5	WF-1	MAIN C.B.A. (F)
94	INH	———	—	—	
95	CPSYNC	CL3503	B-4	W-F131	MAIN C.B.A. (F)
96	COLOR FRAM	CL3504	B-4	WF-131	MAIN C.B.A. (F)
97	VSS	———	—	—	
98	VSS	———	—	—	
99	C O O (0)	———	—	—	
100	VDD	———	—	—	
101	C O O (1)	———	—	—	
102	C O O (2)	———	—	—	
103	C O O (3)	———	—	—	
104	VDD	———	—	—	
105	C O O (4)	———	—	—	
106	VSS	———	—	—	
107	C O O (5)	———	—	—	
108	C O O (6)	———	—	—	
109	C O O (7)	———	—	—	
110	VSS	———	—	—	
111	Y O O (0)	———	—	—	
112	Y O O (1)	———	—	—	
113	VDD	———	—	—	
114	INV	———	—	—	
115	Y O O (2)	———	—	—	
116	Y O O (3)	———	—	—	
117	VDD	———	—	—	
118	Y O O (4)	———	—	—	
119	Y O O (5)	———	—	—	
120	Y O O (6)	———	—	—	

(C): COMPONENT SIDE (F):FOIL SIDE

Check Point of the IC3453

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
1	VDD	———	—	—	
2	VDD	———	—	—	
3	DQ0	———	—	—	
4	VDDQ	———	—	—	
5	DQ1	———	—	—	
6	DQ2	———	—	—	
7	VSSQ	———	—	—	
8	DQ3	———	—	—	
9	DQ4	———	—	—	
10	VDDQ	———	—	—	
11	DQ5	———	—	—	
12	DQ6	———	—	—	
13	VSSQ	———	—	—	
14	DQ7	———	—	—	
15	NC	———	—	—	
16	VDD	———	—	—	
17	DQM0	———	—	—	
18	WE	———	—	—	
19	CAS	———	—	—	
20	RAS	———	—	—	
21	CS	———	—	—	
22	NC	———	—	—	
23	BA0	———	—	—	
24	BA1	———	—	—	
25	A10	———	—	—	
26	A0	———	—	—	
27	A1	———	—	—	
28	A2	———	—	—	
29	DQM2	———	—	—	
30	VDD	———	—	—	
31	NC	———	—	—	
32	DQ16	———	—	—	
33	VSSQ	———	—	—	
34	DQ17	———	—	—	
35	DQ18	———	—	—	
36	VDDQ	———	—	—	
37	DQ19	———	—	—	
38	DQ20	———	—	—	
39	VSSQ	———	—	—	
40	DQ21	———	—	—	
41	DQ22	———	—	—	
42	VDDQ	———	—	—	
43	DQ23	———	—	—	
44	VDD	———	—	—	
45	VDDQ	———	—	—	
46	VSSQ	———	—	—	
47	VSS	———	—	—	
48	DQ24	———	—	—	
49	VSSQ	———	—	—	
50	DQ25	———	—	—	
51	DQ26	———	—	—	
52	VDDQ	———	—	—	
53	DQ27	———	—	—	
54	DQ28	———	—	—	
55	VSSQ	———	—	—	
56	DQ29	———	—	—	
57	DQ30	———	—	—	
58	VDDQ	———	—	—	
59	DQ31	———	—	—	
60	NC	———	—	—	
61	VSS	———	—	—	
62	DQM3	———	—	—	
63	A3	———	—	—	
64	A4	———	—	—	
65	A5	———	—	—	
66	A6	———	—	—	
67	A7	———	—	—	
68	A8	———	—	—	
69	A9	———	—	—	
70	CKE	———	—	—	
71	D CLK	———	—	—	
72	NC	———	—	—	
73	NC	———	—	—	
74	DQM1	———	—	—	
75	VSS	———	—	—	
76	NC	———	—	—	
77	DQ8	———	—	—	
78	VDDQ	———	—	—	
79	DQ9	———	—	—	
80	DQ10	———	—	—	
81	VSSQ	———	—	—	
82	DQ11	———	—	—	
83	DQ12	———	—	—	
84	VDDQ	———	—	—	
85	DQ13	———	—	—	
86	DQ14	———	—	—	
87	VSSQ	———	—	—	
88	DQ15	———	—	—	
89	VSS	———	—	—	
90	VSS	———	—	—	

(C): COMPONENT SIDE (F):FOIL SIDE

Check Point of the IC3452

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
1	A15	———	—	—	
2	A14	———	—	—	
3	A13	———	—	—	
4	A12	———	—	—	
5	A11	———	—	—	
6	A10	———	—	—	
7	A9	———	—	—	
8	A8	———	—	—	
9	NC	———	—	—	
10	NC	———	—	—	
11	WEB	R3421 (UPPER)	D-2	WF-1	SUB C.B.A. (F)
12	RSTB	CL3403	E-3	WF-1	SUB C.B.A. (F)
13	NC	———	—	—	
14	A18	———	—	—	
15	RY/BYE	———	—	—	
16	NC	———	—	—	
17	A17	———	—	—	
18	A7	———	—	—	
19	A6	———	—	—	
20	A5	———	—	—	
21	A4	———	—	—	
22	A3	———	—	—	
23	A2	———	—	—	
24	A1	———	—	—	
25	A0	———	—	—	
26	CEB	CL3427	C-1	WF-1	SUB C.B.A. (F)
27	VSS	———	—	—	
28	QEB	———	—	—	
29	DQ0	———	—	—	
30	DQ8	———	—	—	
31	DQ1	———	—	—	
32	DQ9	———	—	—	
33	DQ2	———	—	—	
34	DQ10	———	—	—	
35	DQ3	———	—	—	
36	DQ11	———	—	—	
37	VCC	———	—	—	
38	DQ4	———	—	—	
39	DQ12	———	—	—	
40	DQ6	———	—	—	
41	DQ13	———	—	—	
42	DQ8	———	—	—	
43	DQ14	———	—	—	
44	DQ7	———	—	—	
45	DQ15	———	—	—	
46	VSS	———	—	—	
47	BYTEB	———	—	—	
48	A16	———	—	—	

(C): COMPONENT SIDE (F): FOIL SIDE

Check Point of the IC3451

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
121	MD2	———	—	—	
122	MD3	———	—	—	
123	MD4	———	—	—	
124	MD7	———	—	—	
125	BREQ	———	—	—	
126	BACK	———	—	—	
127	VCCQ1	———	—	—	
128	VSSQ1	———	—	—	
129	DREQ1/PT	———	—	—	
130	DACK1/PT	CL3417	D-3	WF-1	SUB C.B.A. (F)
131	DREQ0/PT	———	—	—	
132	DACK0/PT	CL3419	E-3	WF-1	SUB C.B.A. (F)
133	NMI	QR3401-C	E-8	WF-1	SUB C.B.A. (C)
134	IRQ3/PT	———	—	—	
135	VCC	———	—	—	
136	VSS	———	—	—	
137	IRQ2/PT	———	—	—	
138	IRQ1/PT	———	—	—	
139	IRQ0/PT	———	—	—	
140	ASEBRKAK	CL3415	D-2	WF-1	SUB C.B.A. (F)
141	CKE	———	—	—	
142	VCCQ1	———	—	—	
143	CKIO	CL3426	D-2	WF-1	SUB C.B.A. (F)
144	VSSQ1	———	—	—	
145	AU DATA3	CL3414	E-2	WF-1	SUB C.B.A. (F)
146	AU DATA2	CL3413	D-3	WF-1	SUB C.B.A. (F)
147	AU DCK	CL3412	D-3	WF-1	SUB C.B.A. (F)
148	AU DATA1	CL3411	D-2	WF-1	SUB C.B.A. (F)
149	AU DATA0	CL3410	D-2	WF-1	SUB C.B.A. (F)
150	VCC	———	—	—	
151	VSS	———	—	—	
152	AUD SYNC	CL3409	E-3	WF-1	SUB C.B.A. (F)
153	TRST	CL3408	D-3	WF-1	SUB C.B.A. (F)
154	TDO	CL3407	D-3	WF-1	SUB C.B.A. (F)
155	TCK	CL3406	E-3	WF-1	SUB C.B.A. (F)
156	TMS	CL3405	D-3	WF-1	SUB C.B.A. (F)
157	TDI	CL3404	D-3	WF-1	SUB C.B.A. (F)
158	VCCQ1	———	—	—	
159	XTAL	———	—	—	
160	EXTAL	———	—	—	
161	VSSQ1	———	—	—	
162	MD8	———	—	—	
163	MD9	———	—	—	
164	RESET OUT	CL3420	D-3	WF-1	SUB C.B.A. (F)
165	VSS	———	—	—	
166	VCC	———	—	—	
167	RESET P	CL3403	E-3	WF-1	SUB C.B.A. (F)
168	VCC (PLL1)	———	—	—	
169	VSS (PLL1)	———	—	—	
170	VCC (PLL2)	———	—	—	
171	VSS (PLL2)	———	—	—	
172	VSSQ3	———	—	—	
173	VSSQ2	———	—	—	
174	SIU I LR	RX3005-3	F-5	WF-185	MAIN C.B.A. (F)
175	SIU I BT	RX3005-7	F-5	WF-187	MAIN C.B.A. (F)
176	SIU I SLD	RX3005-1	F-5	WF-184	MAIN C.B.A. (F)
177	SIU O LR	RX-3005-3	F-5	WF-185	MAIN C.B.A. (F)
178	SIU O BT	RX3005-7	F-5	WF-187	MAIN C.B.A. (F)
179	SIU O SLD	RL3005	D-6	WF-1	MAIN C.B.A. (C)
180	SIU MLK	———	—	—	

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
181	SHMF IMD	———	—	—	
182	SHMF INT	QR2001-B	B-6	WF-1	MAIN C.B.A. (F)
183	SHMF IRD	———	—	—	
184	SHMF EWR	———	—	—	
185	SHMF IRS	———	—	—	
186	VCCQ2	———	—	—	
187	VSSQ3	———	—	—	
188	SHMF ID7	———	—	—	
189	SHMF ID6	———	—	—	
190	SHMF ID5	———	—	—	
191	SHMF ID4	———	—	—	
192	SHMF ID3	———	—	—	
193	SHMF ID2	———	—	—	
194	SHMF ID1	———	—	—	
195	SHMF ID0	———	—	—	
196	VSSQ3	———	—	—	
197	VCCQ2	———	—	—	
198	SHMF ICS	———	—	—	
199	YC IO7	———	—	—	
200	YC IO6	———	—	—	
201	YC IO5	———	—	—	
202	YC IO4	———	—	—	
203	YC IO3	———	—	—	
204	VSSQ3	———	—	—	
205	VCCQ2	———	—	—	
206	YC IO2	———	—	—	
207	YC IO1	———	—	—	
208	YC IO0	———	—	—	
209	CLK27D	R3423 (LOWER)		WF-122	SUB C.B.A. (F)
210	VCC	———	—	—	
211	VSS	———	—	—	
212	CLK27B	———	—	—	
213	VCCQ2	———	—	—	
214	MP RAS	———	—	—	
215	VSSQ2	———	—	—	
216	MP CAS	———	—	—	
217	MP A13	———	—	—	
218	MP A12	———	—	—	
219	MP A11	———	—	—	
220	MP A10	———	—	—	
221	MP A9	———	—	—	
222	MP A8	———	—	—	
223	MP A7	———	—	—	
224	MP A6	———	—	—	
225	VSSQ2	———	—	—	
226	VCCQ2	———	—	—	
227	MP A5	———	—	—	
228	MP A4	———	—	—	
229	MP A3	———	—	—	
230	MP A2	———	—	—	
231	MP A1	———	—	—	
232	MP A0	———	—	—	
233	MP DQMU/WE3/DQM3	———	—	—	
234	VSSQ2	———	—	—	
235	MP CLK	———	—	—	
236	VCCQ2	———	—	—	
237	MP DQML/WE2/DQM2	———	—	—	
238	MP D15/D31	———	—	—	
239	MP D14/D30	———	—	—	
240	MP D13/D29	———	—	—	

(C): COMPONENT SIDE (F):FOIL SIDE

Check Point of the IC3451

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
1	MP D12/D28	———	—	—	
2	MP D11/D27	———	—	—	
3	MP D10/D26	———	—	—	
4	MP D9/D25	———	—	—	
5	VCCQ2	———	—	—	
6	VSSQ2	———	—	—	
7	MP D8/D24	———	—	—	
8	MP WE	———	—	—	
9	MP D7/D23	———	—	—	
10	MP D6/D22	———	—	—	
11	MP D5/D21	———	—	—	
12	MP CKE	———	—	—	
13	MP D4/D20	———	—	—	
14	MP CS	———	—	—	
15	VCC	———	—	—	
16	VSS	———	—	—	
17	MP D3/D19	———	—	—	
18	MP D2/D18	———	—	—	
19	VCCQ2	———	—	—	
20	VSSQ2	———	—	—	
21	MP D1/D17	———	—	—	
22	MP D0/D16	———	—	—	
23	LSIMD	———	—	—	
24	AVSS (USB)	———	—	—	
25	DP	———	—	—	
26	DM	———	—	—	
27	AVCC (USB)	———	—	—	
28	VBUS/PT	———	—	—	
29	TEST3	———	—	—	
30	VCC	———	—	—	
31	VSS	———	—	—	
32	TEST2	———	—	—	
33	TEST1	———	—	—	
34	TEST0	———	—	—	
35	VCKMD	———	—	—	
36	WE0/DQM0	———	—	—	
37	WE1/DQM1	R3421 (UPPER)	D-2	WF-1	SUB C.B.A. (F)
38	D15	———	—	—	
39	VCCQ1	———	—	—	
40	VSSQ1	———	—	—	
41	D14	———	—	—	
42	D13	———	—	—	
43	D12	———	—	—	
44	D11	———	—	—	
45	D10	———	—	—	
46	VSS	———	—	—	
47	VCC	———	—	—	
48	TAP SEL	———	—	—	
49	D9	———	—	—	
50	D8	———	—	—	
51	D7	———	—	—	
52	D6	———	—	—	
53	D5	———	—	—	
54	VSSQ1	———	—	—	
55	VCCQ1	———	—	—	
56	D4	———	—	—	
57	D3	———	—	—	
58	D2	———	—	—	
59	D1	———	—	—	
60	D0	———	—	—	
61	A0/BS/PT	———	—	—	
62	A1	———	—	—	
63	A2	———	—	—	
64	A3	———	—	—	
65	A4	———	—	—	
66	VSSQ1	———	—	—	
67	VDDQ1	———	—	—	
68	A5	———	—	—	
69	A6	———	—	—	
70	A7	———	—	—	
71	SD CD	———	—	—	
72	A8	———	—	—	
73	A9	———	—	—	
74	SD WP/PT	R3420 (UPPER)	C-9	WF-1	SUB C.B.A. (C)
75	A10	———	—	—	
76	A11	———	—	—	
77	A12	———	—	—	
78	A13	———	—	—	
79	VCCQ1	———	—	—	
80	VSSQ1	———	—	—	
81	A14	———	—	—	
82	A15	———	—	—	
83	A16	———	—	—	
84	SD DO/PT	———	—	—	
85	A17	———	—	—	
86	A18	———	—	—	
87	SD D1/PT	———	—	—	
88	A19	———	—	—	
89	VCC	———	—	—	
90	UCLK	———	—	—	
91	VSS	———	—	—	
92	A20	———	—	—	
93	A21/PT	———	—	—	
94	A22/PT	———	—	—	
95	VSSQ1	———	—	—	
96	VCCQ1	———	—	—	
97	A23/PT	———	—	—	
98	A24/CAS/PT	———	—	—	
99	SD D2/PT	———	—	—	
100	A25/RAS/PT	———	—	—	
101	SD D3/PT	———	—	—	
102	RD	———	—	—	
103	ASEMD0	———	—	—	
104	MD0	———	—	—	
105	STATAUS0	CL3416	D-2	WF-1	SUB C.B.A. (F)
106	SD CLK	———	—	—	
107	VSSQ1	———	—	—	
108	VCCQ1	———	—	—	
109	SD CMD/PT	———	—	—	
110	RDWR	———	—	—	
111	MD1	———	—	—	
112	WAIT	———	—	—	
113	SCIF TXD/PT	CL3422	E-2	WF-164	SUB C.B.A. (F)
114	SCIF RXD/PT	CL3421	F-3	WF-165	SUB C.B.A. (F)
115	SCIF SCK/PT	CL3425	F-3	WF-163	SUB C.B.A. (F)
116	CS0	R3422 (UPPER)	C-1	WF-1	SUB C.B.A. (F)
117	CS3/PT	CL3418	D-2	WF-1	SUB C.B.A. (F)
118	CS4/PT	———	—	—	
119	CS5A/PT	CL3424	F-3	WF-1	SUB C.B.A. (F)
120	CS6B/PT	CL3423	F-4	WF-1	SUB C.B.A. (F)

(C): COMPONENT SIDE (F):FOIL SIDE

Check Point of the IC3201

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
1	DVSS	———	—	—	
2	VRH	C3207 (LEFT)	B-2	WF-1	MAIN C.B.A. (C)
3	VRL	C3208 (LEFT)	B-2	WF-1	MAIN C.B.A. (C)
4	AVD12 (ADC1)	———	—	—	
5	AD TEST	———	—	—	
6	AVD12 (ADC1)	———	—	—	
7	AVD14 (AMP1)	———	—	—	
8	AVD14 (AMP1)	———	—	—	
9	PB IN	CL3203	B-1	WF-142	MAIN C.B.A. (C)
10	AVD15 (ADC2)	———	—	—	
11	ATF IN	C3206 (LOWER)	B-2	WF-176	MAIN C.B.A. (C)
12	AVS15 (ADC2)	———	—	—	
13	AVD13 (ADC1/2)	———	—	—	
14	AVS13 (ADC1/2)	———	—	—	
15	AVD16 (VREF)	———	—	—	
16	VCORP	R3202 (LOWER)	B-2	WF-2	MAIN C.B.A. (C)
17	AVS16 (VREF)	———	—	—	
18	AVS22 (DAC2/3)	———	—	—	
19	OSO	R3206 (RIGHT)	B-1	WF-1	MAIN C.B.A. (C)
20	VREF3	———	—	—	
21	VREF2	C3210 (RIGHT)	B-1	WF-1	MAIN C.B.A. (C)
22	AVD22 (DAC2/3)	———	—	—	
23	ATF0	R3203 (LOWER)	B-2	WF-1	MAIN C.B.A. (C)
24	VERF1	C3213 (LEFT)	C-2	WF-1	MAIN C.B.A. (C)
25	FPORP	R3204 (LOWER)	B-2	WF-1	MAIN C.B.A. (C)
26	AVS21 (ADC1)	———	—	—	
27	AVD21 (ADC1)	———	—	—	
28	FPO	R3207 (UPPER)	B-1	WF-1	MAIN C.B.A. (C)
29	VCO IN	R3207 (LOWER)	B-1	WF-1	MAIN C.B.A. (C)
30	AVS11 (VCO)	———	—	—	
31	AVD11 (VCO)	———	—	—	
32	DVDD25	———	—	—	
33	AGC CTL	RX3202-7	A-1	WF-1	MAIN C.B.A. (C)
34	RECCUR	RX3202-5	A-1	WF-1	MAIN C.B.A. (C)
35	CAP ERR	RX3202-3	A-1	WF-1	MAIN C.B.A. (C)
36	CYL ERR	RX3202-1	A-1	WF-1	MAIN C.B.A. (C)
37	CAP RSF	RL3011	B-1	WF-1	MAIN C.B.A. (C)
38	DVSS	———	—	—	
39	TRST	R3211 (LEFT)	B-2	WF-1	MAIN C.B.A. (C)
40	TMS	R3071 (LEFT)	B-4	WF-131	MAIN C.B.A. (F)
41	TDI	———	—	—	
42	TDO	———	—	—	
43	TCK	R3072 (UPPER)	B-3	WF-1	MAIN C.B.A. (F)
44	HID1	IC5001-17	B-9	WF-140	MAIN C.B.A. (F)
45	HID2	IC5001-16	B-9	WF-1	MAIN C.B.A. (F)
46	SPA	CL3201	A-2	WF-1	MAIN C.B.A. (C)
47	DVSS	———	—	—	
48	RECI	IC5001-19	B-9	WF-1	MAIN C.B.A. (F)
49	EQHLD	IC5001-11	B-9	WF-1	MAIN C.B.A. (F)
50	HSE	CL3208	A-2	WF-1	MAIN C.B.A. (C)
51	REC CLK	CL3213	A-2	WF-190	MAIN C.B.A. (C)
52	DVDD18	———	—	—	
53	REC CTL	IC5001-15	B-9	WF-1	MAIN C.B.A. (F)
54	PBH	R5015 (LOWER)	B-8	WF-1	MAIN C.B.A. (F)
55	CYL FG	CL2205	A-6	WF-180	MAIN C.B.A. (C)
56	DRIVE CLK	R2222 (LEFT)	C-6	WF-178	MAIN C.B.A. (C)
57	DVSS	———	—	—	
58	CYL PG	CL2204	C-7	WF-179	MAIN C.B.A. (C)
59	ADM (0)	R3215 (RIGHT)	A-1	WF-1	MAIN C.B.A. (C)
60	ADM (1)	R3214 (LEFT)	A-2	WF-1	MAIN C.B.A. (C)
61	ADM (2)	RL3010	A-2	WF-1	MAIN C.B.A. (C)
62	DVDD18	———	—	—	
63	ADM (3)	RL3009	A-2	WF-1	MAIN C.B.A. (C)
64	ADM (4)	R3218 (UPPER)	A-2	WF-1	MAIN C.B.A. (C)
65	ADM (5)	R3221 (LEFT)	B-3	WF-1	MAIN C.B.A. (C)
66	DVSS	———	—	—	
67	ADM (6)	R3222 (LEFT)	B-3	WF-1	MAIN C.B.A. (C)
68	ADM (7)	R3223 (LEFT)	B-3	WF-1	MAIN C.B.A. (C)
69	ADM (8)	R2220 (UPPER)	C-7	WF-98	MAIN C.B.A. (C)
70	DVDD18	———	—	—	
71	ADM (9)	R2212 (LEFT)	B-6	WF-1	MAIN C.B.A. (C)
72	ADM (10)	RL3008	A-2	WF-1	MAIN C.B.A. (C)
73	ADM (11)	R3002 (LEFT)	D-6	WF-218	MAIN C.B.A. (C)
74	ADM (12)	———	—	—	
75	DVSS	———	—	—	
76	ADM (13)	———	—	—	
77	ADM (14)	———	—	—	
78	ADM (15)	———	—	—	
79	AS	———	—	—	
80	DVDD18	———	—	—	
81	XRE	———	—	—	
82	XWEL	RX2202-5	A-7	WF-157	MAIN C.B.A. (F)
83	XWEH	RX2202-3	A-7	WF-158	MAIN C.B.A. (F)
84	CLK27A	R3063 ()	C-6	WF-183	MAIN C.B.A. (C)
85	DVSS	———	—	—	
86	DBR (0)	RL3014	A-2	WF-1	MAIN C.B.A. (C)
87	DBR (1)	———	—	—	
88	DBR (2)	———	—	—	
89	DBR (3)	———	—	—	
90	DVDD18	———	—	—	
91	REQR	R3020 ()	D-6	WF-1	MAIN C.B.A. (C)
92	ACKR	———	—	—	
93	TSTCKI	———	—	—	
94	DVSS	———	—	—	
95	TSTDT (0)	———	—	—	
96	TSTDT (1)	———	—	—	
97	TSTDT (2)	———	—	—	
98	DVDD18	———	—	—	
99	TSTDT (3)	———	—	—	
100	TSTDT (4)	———	—	—	
101	TSTDT (5)	———	—	—	
102	TSTDT (6)	———	—	—	
103	DVSS	———	—	—	
104	TSTDT (7)	———	—	—	
105	TSTDT (8)	———	—	—	
106	TSTDT (9)	———	—	—	
107	VPD	———	—	—	
108	DVDD18	———	—	—	
109	XRST	R3211 (RIGHT)	B-2	WF-1	MAIN C.B.A. (C)
110	TSTMD	———	—	—	
111	CS	———	—	—	
112	GE SW	———	—	—	

(C): COMPONENT SIDE (F):FOIL SIDE

Check Point of the IC3001

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
241	DAC AVDD25	————	—	—	
242	LCD R OUT	Q603-B	B-5	WF-171	MAIN C.B.A. (C)
243	LCD RVBS	C3064 (RIGHT)	D-5	WF-1	MAIN C.B.A. (C)
244	DAC AVSS	————	—	—	
245	DAC AVSS	————	—	—	
246	DAC AVDD25	————	—	—	
247	DAC AVDD25	————	—	—	
248	LCD G OUT	Q602-B	B-5	WF-172	MAIN C.B.A. (C)
249	LCD GVBS	C3063 (RIGHT)	E-5	WF-1	MAIN C.B.A. (C)
250	LCD REF	C3062 (LOWER)	E-4	WF-1	MAIN C.B.A. (C)
251	DAC AVSS	————	—	—	
252	DAC AVDD25	————	—	—	
253	LCD B OUT	Q601-B	B-5	WF-173	MAIN C.B.A. (C)
254	LCD BVBS	C3061 (LOWER)	E-5	WF-1	MAIN C.B.A. (C)
255	DAC AVSS	————	—	—	
256	DAC AVSS	————	—	—	
257	DAC AVDD25	————	—	—	
258	DAC AVDD25	————	—	—	
259	Y OUT	C3303 (LOWER)	E-4	WF-171	MAIN C.B.A. (F)
260	YVBS	C3060 (LOWER)	E-5	WF-1	MAIN C.B.A. (C)
261	YREF	C3059 (LOWER)	E-4	WF-1	MAIN C.B.A. (C)
262	DAC AVSS	————	—	—	
263	DAC AVDD25	————	—	—	
264	C OUT	C3319 (LOWER)	E-5	WF-1	MAIN C.B.A. ()
265	CVBS	C3058 (LOWER)	D-5	WF-1	MAIN C.B.A. ()
266	CREF	C3057 (RIGHT)	E-4	WF-1	MAIN C.B.A. ()
267	DAC AVSS	————	—	—	
268	VSS	————	—	—	
269	VDD32	————	—	—	
270	VSS	————	—	—	
271	SDCLK	R3007 (RIGHT)	D-4	WF-1	MAIN C.B.A. (C)
272	DATA (3)	R3906 (ROGHT)	A-2	WF-1	SD HOLDER C.B.A. (F)
273	DATA (2)	R3905 (RIGHT)	A-2	WF-1	SD HOLDER C.B.A. (F)
274	DATA (1)	R3908 (LOWER)	A-2	WF-1	SD HOLDER C.B.A. (F)
275	DATA (0)	R3907 (LOWER)	A-2	WF-1	SD HOLDER C.B.A. (F)
276	NC	————	—	—	
277	CMD	R3006 (RIGHT)	D-4	WF-1	MAIN C.B.A. (C)
278	NC	————	—	—	
279	SD VDD32	————	—	—	
280	VDD15	————	—	—	
281	CLK48O	C3067 (LEFT)	D-4	WF-132	MAIN C.B.A. (C)
282	CLK 48I	C3066 (RIGHT)	D-4	WF-132	MAIN C.B.A. (C)
283	NC	————	—	—	
284	NC	————	—	—	
285	NC	————	—	—	
286	VDD25	————	—	—	
287	VSS	————	—	—	
288	NC	————	—	—	
289	NC	————	—	—	
290	NC	————	—	—	
291	USB DP	CL3001	E-9	WF-1	MAIN C.B.A. (C)
292	USB DM	CL3002	E-9	WF-1	MAIN C.B.A. (C)
293	VSS	————	—	—	
294	USB VDD32	————	—	—	
295	USB VDD32	————	—	—	
296	VDD30	————	—	—	
297	CAM LENS DTO	————	—	—	
298	CAM LENS CLK	————	—	—	
299	CAM LENS CS	————	—	—	
300	CAM C G AFE DTO	————	—	—	
301	VDD30	————	—	—	
302	CAM C G AFE CLK				
303	CAM C G CS				
304	CAM AFE CS				
305	VSS	————	—	—	
306	OSD VR	RL3029	C-3	WF-171	MAIN C.B.A. (C)
307	OSD VG	RL3028	C-3	WF-172	MAIN C.B.A. (C)
308	OSD VB	RL3027	C-3	WF-173	MAIN C.B.A. (C)
309	OSD BLK A	RL3026	C-3	WF-1	MAIN C.B.A. (C)
310	VSS	————	—	—	
311	VDD15	————	—	—	
312	OSD BLK B	RL3025	C-3	WF-1	MAIN C.B.A. (C)
313	FAD VDD15	————	—	—	
314	FAD VSS	————	—	—	
315	FAD VDD32	————	—	—	
316	OSD HD	RL3020	C-3	WF-131	MAIN C.B.A. (C)
317	OSD VD	RL3007	C-3	WF-131	MAIN C.B.A. (C)
318	LCD VBLK	R912 (RIGHT)	D-7	WF-129	MONITOR C.B.A. (F)
319	LCD HD	R913 (RIGHT)	D-7	WF-126	MONITOR C.B.A. (F)
320	VSS	————	—	—	
321	LCDPOL	R3008 (RIGHT)	C-4	WF-1	MAIN C.B.A. (C)
322	VDD30	————	—	—	
323	CLK45M ZB	————	—	—	
324	AFDR VD	————	—	—	
325	LINPWM	————	—	—	
326	OSD CLK	RL3004	B-2	WF-1	MAIN C.B.A. (C)
327	FSLPH0	R3048 (RIGHT)	C-4	WF-1	MAIN C.B.A. (C)
328	DTCLK	————	—	—	
329	DVM	————	—	—	
330	FAD VDD32	————	—	—	
331	FAD VSS	————	—	—	
332	FAD VDD15	————	—	—	
333	VDD30	————	—	—	
334	VDD18	————	—	—	
335	TRACE CLK	R3016 (RIGHT)	C-4	WF-1	MAIN C.B.A. (C)
336	TRACE SYNC	R3017 (RIGHT)	C-4	WF-1	MAIN C.B.A. (C)
337	TRACE PKT (0)	RX3004-8	C-4	WF-1	MAIN C.B.A. (C)
338	TRACE PKT (1)	RX3004-6	C-4	WF-1	MAIN C.B.A. (C)
339	VDD18	————	—	—	
340	VDD15	————	—	—	
341	VSS	————	—	—	
342	SD VDD15	————	—	—	
343	SD VSS	————	—	—	
344	SD VDD25	————	—	—	
345	TRACEPKT (2)	RX3004-4	C-4	WF-1	MAIN C.B.A. (C)
346	TRACEPKT (3)	RX3004-2	C-4	WF-1	MAIN C.B.A. (C)
347	TRACEPKT (4)	RX3002-2	C-4	WF-1	MAIN C.B.A. (C)
348	TRACEPKT (5)	RX3002-4	C-4	WF-1	MAIN C.B.A. (C)
349	TRACEPKT (6)	RX3002-6	C-4	WF-1	MAIN C.B.A. (C)
350	TRACEPKT (7)	RX3002-8	C-4	WF-1	MAIN C.B.A. (C)
351	PIPESTAT (0)	RX3003-2	C-4	WF-1	MAIN C.B.A. (C)
352	PIPESTAT (1)	RX3003-4	C-4	WF-1	MAIN C.B.A. (C)
353	PIPESTAT (2)	RX3003-6	C-4	WF-1	MAIN C.B.A. (C)
354	A15	R3012 (RIGHT)	B-4	WF-1	MAIN C.B.A. (C)
355	VSS	————	—	—	
356	SD VDD25	————	—	—	
357	SD VSS	————	—	—	
358	SD VDD15	————	—	—	
359	VSS	————	—	—	
360	RTCK	RX3003-8	C-4	WF-1	MAIN C.B.A. (C)
361	XTRST	R3021 (LOWER)	C-4	WF-1	MAIN C.B.A. (C)

(C): COMPONENT SIDE (F):FOIL SIDE

Check Point of the IC3001

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
121	NC	———	—	—	
122	VDD18	———	—	—	
123	S400	———	—	—	
124	BIAS2K	———	—	—	
125	VSS	———	—	—	
126	CLK24I	C3040 (LEFT)	C-6	WF-132	MAIN C.B.A. (C)
127	VDD25	———	—	—	
128	NC	———	—	—	
129	NC	———	—	—	
130	CLK24O	C3039 (LEFT)	D-6	WF-132	MAIN C.B.A. (C)
131	SD VDD25	———	—	—	
132	SD VSS	———	—	—	
133	SD VDD15	———	—	—	
134	VDD15	———	—	—	
135	1394 AVSS	———	—	—	
136	1394 AVDD15	———	—	—	
137	1394 AVSS	———	—	—	
138	R (1)	R3013 (RIGHT)	D-6	WF-1	MAIN C.B.A. (C)
139	NC	———	—	—	
140	R (0)	R3013 (LEFT)	D-6	WF-1	MAIN C.B.A. (C)
141	1394 AVDD30	———	—	—	
142	NC	———	—	—	
143	1394 AVSS	———	—	—	
144	1394 AVSS	———	—	—	
145	TPBN	CL3007	D-6	WF-1	MAIN C.B.A. (C)
146	NC	———	—	—	
147	NC	———	—	—	
148	TPBP	CL3008	D-6	WF-1	MAIN C.B.A. (C)
149	NC	———	—	—	
150	TPAN	CL3009	D-6	WF-1	MAIN C.B.A. (C)
151	TPAP	CL3010	D-6	WF-1	MAIN C.B.A. (C)
152	TPBIAS	C3043 (UPPER)	D-6	WF-1	MAIN C.B.A. (C)
153	1394 AVDD30	———	—	—	
154	1394 AVDD15	———	—	—	
155	VDD15	———	—	—	
156	XRST	R3021 (LOWER)	C-4	WF-1	MAIN C.B.A. (C)
157	SSP	RL3031	E-6	WF-1	MAIN C.B.A. (C)
158	VDD18	———	—	—	
159	HID	R3212 (LEFT)	B-1	WF-140	MAIN C.B.A. (C)
160	VDD18	———	—	—	
161	DBR3	———	—	—	
162	DBR2	———	—	—	
163	DBR1	———	—	—	
164	DBR0	RL3014	A-2	WF-1	MAIN C.B.A. (C)
165	VSS	———	—	—	
166	ACKR	———	—	—	
167	REQR	R3020 (LEFT)	D-6	WF-1	MAIN C.B.A. (C)
168	ADDA (3)	———	—	—	
169	ADDA (2)	———	—	—	
160	VSS	———	—	—	
171	ADDA (1)	———	—	—	
172	VDD15	———	—	—	
173	ADDA (0)	———	—	—	
174	VAL	———	—	—	
175	REACH	———	—	—	
176	INTSEG	R3002 (LEFT)	D-6	WF-218	MAIN C.B.A. (C)
177	VDD18	———	—	—	
178	DO DAT	RX3005-2	F-5	WF-184	MAIN C.B.A. (F)
179	VDD18	———	—	—	
180	DO LRCK	RX3005-4	F-5	WF-185	MAIN C.B.A. (F)

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
181	DO MCK	RX3005-6	F-5	WF-186	MAIN C.B.A. (F)
182	DO BCK	RX3005-8	F-5	WF-187	MAIN C.B.A. (F)
183	AI DAT1	IC3301-6	E-4	WF-1	MAIN C.B.A. (F)
184	AI DAT2	———	—	—	
185	VSS	———	—	—	
186	ADEC DAT	RL3005	D-6	WF-1	MAIN C.B.A. (C)
187	VSS	———	—	—	
188	CLK27C	IC601-59	E-5	WF-122	MAIN C.B.A. (F)
189	L YC IO0	RL3012	E-5	WF-210	MAIN C.B.A. (F)
190	L YC IO1	IC601-57	E-5	WF-210	MAIN C.B.A. (F)
191	L YC IO2	IC601-55	E-5	WF-210	MAIN C.B.A. (F)
192	L YC IO3	IC601-54	E-5	WF-210	MAIN C.B.A. (F)
193	VDD15	———	—	—	
194	L YC IO4	IC601-53	E-5	WF-210	MAIN C.B.A. (F)
195	L YC IO5	IC601-52	E-5	WF-210	MAIN C.B.A. (F)
196	L YC IO6	IC601-51	E-5	WF-210	MAIN C.B.A. (F)
197	L YC IO7	IC601-50	E-5	WF-210	MAIN C.B.A. (F)
198	VDD18	———	—	—	
199	FRP	RL3032	E-5	WF-147	MAIN C.B.A. (C)
200	INF	R3040 (LEFT)	D-5	WF-1	MAIN C.B.A. (C)
201	SHMF INT	R3077 (LEFT)	D-5	WF-1	MAIN C.B.A. (C)
202	SHMF IRD	———	—	—	
203	VDD8	———	—	—	
204	VSS	———	—	—	
205	SHMF IWR	———	—	—	
206	SHMF IRS	———	—	—	
207	SHMF ICS	———	—	—	
208	SHMF ID0	———	—	—	
209	SHMF ID1	———	—	—	
210	SHMF ID2	———	—	—	
211	SHMF ID3	———	—	—	
212	SHMF ID4	———	—	—	
213	SHMF ID5	———	—	—	
214	SHMF ID6	———	—	—	
215	SHMF ID7	———	—	—	
216	CLK27D	RL3008	A-2	WF-122	MAIN C.B.A. (C)
217	YC IO (0)	———	—	—	
218	YC IO (1)	———	—	—	
219	YC IO (2)	———	—	—	
220	YC IO (3)	———	—	—	
221	VSS	———	—	—	
222	YC IO (4)	———	—	—	
223	YC IO (5)	———	—	—	
224	YC IO (6)	———	—	—	
225	YC IO (7)	———	—	—	
226	CLK 27X	———	—	—	
227	YC IN (0)	———	—	—	
228	YC IN (1)	———	—	—	
229	YC IN (2)	———	—	—	
230	YC IN (3)	———	—	—	
231	YC IN (4)	———	—	—	
232	YC IN (5)	———	—	—	
233	VDD15	———	—	—	
234	YC IN (6)	———	—	—	
235	YC IN (7)	———	—	—	
236	VSS	———	—	—	
237	VDD18	———	—	—	
238	BUS MODE	———	—	—	
239	VDD18	———	—	—	
240	VSS	———	—	—	

(C): COMPONENT SIDE (F):FOIL SIDE

Check Point of the IC3001

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
1	TMS	R3071 (RIGHT)	B-4	WF-1	MAIN C.B.A. (F)
2	TCK	R3072 (LOWER)	B-3	WF-1	MAIN C.B.A. (F)
3	TDI	R2028 (LEFT)	B-6	WF-1	MAIN C.B.A. (F)
4	VDD18	———	——	——	
5	TDO	———	——	——	
6	VDD18	———	——	——	
7	XDUO CS	———	——	——	
8	ADM (15)	———	——	——	
9	ADM (14)	———	——	——	
10	ADM (13)	———	——	——	
11	ADM (12)	———	——	——	
12	VSS	———	——	——	
13	ADM (11)	———	——	——	
14	ADM (10)	———	——	——	
15	ADM (9)	———	——	——	
16	ADM (8)	———	——	——	
17	VSS	———	——	——	
18	VDD15	———	——	——	
19	ADM (7)	———	——	——	
20	ADM (6)	———	——	——	
21	ADM (5)	———	——	——	
22	ADM (4)	———	——	——	
23	VSS	———	——	——	
24	ADM (3)	———	——	——	
25	ADM (2)	———	——	——	
26	ADM (1)	———	——	——	
27	VDD18	———	——	——	
28	ADM (0)	RL3019	C-1	WF-1	MAIN C.B.A. (C)
29	ALE	———	——	——	
30	XWEH	RL3021	C-2	WF-1	MAIN C.B.A. (C)
31	XWEL	RL3022	C-2	WF-1	MAIN C.B.A. (C)
32	VDD18	———	——	——	
33	XRE	RL3023	C-2	WF-1	MAIN C.B.A. (C)
34	XREADY	RL3024	B-6	WF-1	MAIN C.B.A. (F)
35	XRST ARM	CL3004	B-4	WF-1	MAIN C.B.A. (C)
36	VDD15	———	——	——	
37	VSS	———	——	——	
38	VCO AVDD25	———	——	——	
39	VCO AVDD25	———	——	——	
40	FSLPFI	C3068 (RIGHT)	C-4	WF-1	MAIN C.B.A. (C)
41	VCO AVSS	———	——	——	
42	VCO AVSS	———	——	——	
43	PLL AVDD25	———	——	——	
44	PLL AVDD25	———	——	——	
45	PLL AVSS	———	——	——	
46	PLL AVSS	———	——	——	
47	VSS	———	——	——	
48	FCK45	RL3016	D-6	WF-131	MAIN C.B.A. (C)
49	CAM HD	RL3017	D-6	WF-1	MAIN C.B.A. (C)
50	CAM VD	RL3018	D-6	WF-1	MAIN C.B.A. (C)
51	ADIN (9)	———	——	——	
52	ADIN (8)	———	——	——	
53	VDD18 30	———	——	——	
54	ADIN (7)	———	——	——	
55	ADIN (6)	———	——	——	
56	ADIN (5)	———	——	——	
57	ADIN (4)	———	——	——	
58	ADIN (3)	———	——	——	
59	ADIN (2)	RL3030	D-6	WF-1	MAIN C.B.A. (C)
60	ADIN (1)	———	——	——	
61	ADIN (0)	———	——	——	
62	VDD18 30	———	——	——	
63	FCA	———	——	——	
64	FCB	———	——	——	
65	F2C	———	——	——	
66	ZACOMP	———	——	——	
67	VSS	———	——	——	
68	VDD15	———	——	——	
69	ZBCOMP	———	——	——	
70	ZCCOMP	RL3015	D-6	WF-1	MAIN C.B.A. (C)
71	ZDCOMP	———	——	——	
72	SIG	———	——	——	
73	ALC PWM	———	——	——	
74	VDD18 30	———	——	——	
75	IRIS CLOSE	———	——	——	
76	IRIS OPEN	———	——	——	
77	HOST REQ	IC2019-1	C-6	WF-1	MAIN C.B.A. (F)
78	HOST ACK	R2072 (UPPER)	C-7	WF-1	MAIN C.B.A. (F)
79	VDD18 30	———	——	——	
80	DUO INT3	IC2019-3	C-6	WF-1	MAIN C.B.A. (F)
81	VSS	———	——	——	
82	DUO INT2	IC2018-6	B-6	WF-1	MAIN C.B.A. (F)
83	DUO INT1	IC2018-1	B-6	WF-1	MAIN C.B.A. (F)
84	DUO INT0	IC2018-3	B-6	WF-1	MAIN C.B.A. (F)
85	VSS	———	——	——	
86	VDD15	———	——	——	
87	VSS	———	——	——	
88	VSS	———	——	——	
89	VDD18 30	———	——	——	
90	VDD18 30	———	——	——	
91	SD VDD15	———	——	——	
92	SD VDD15	———	——	——	
93	SD VSS	———	——	——	
94	SD VSS	———	——	——	
95	SD VDD25	———	——	——	
96	VDD18	———	——	——	
97	SCLK541	———	——	——	
98	VDD18	———	——	——	
99	CLKSEL2				
100	CLK27B	———	——	——	
101	CLKSEL0	———	——	——	
102	CLK27A	R3063 (UPPER)	C-6	WF-183	MAIN C.B.A. (C)
103	CLKSEL1	———	——	——	
104	CLK135	RL3003	C-6	WF-183	MAIN C.B.A. (C)
105	SD VDD25	———	——	——	
106	SD VSS	———	——	——	
107	SD VDD15	———	——	——	
108	VSS	———	——	——	
109	VDD15	———	——	——	
110	TESTMD (0)	R3051 (UPPER)	C-5	WF-1	MAIN C.B.A. (C)
111	TESTMD (1)	———	——	——	
112	TESTMD (2)	———	——	——	
113	SD VDD15	———	——	——	
114	SD VSS	———	——	——	
115	SD VDD25	———	——	——	
116	TESTMD (3)	———	——	——	
117	TESTMD (4)	———	——	——	
118	TESTMD (5)	R3009 (UPPER)	C-5	WF-1	MAIN C.B.A. (C)
119	VSS	———	——	——	
120	VDD18	———	——	——	

(C): COMPONENT SIDE (F):FOIL SIDE

Check Point of the IC2001

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
241	FLASH CE	CL2030	D-2	WF-1	MAIN C.B.A. (C)
242	SH WAKEUP	QR3401-B	E-8	WF-1	SUB C.B.A. (C)
243	NC	—	—	—	
244	NC	—	—	—	
245	NC	—	—	—	
246	STNDBY LED	QR2006-2	A-5	WF-1	MAIN C.B.A. (F)
247	POWER LED	QR2005-B	B-6	WF-1	MAIN C.B.A. (F)
248	TALLY LED	QR2006-5	A-5	WF-1	MAIN C.B.A. (F)
249	NC	—	—	—	
250	DVSS	—	—	—	
251	NC	—	—	—	
252	DVCC2	—	—	—	
253	AVSS	—	—	—	
254	LOAD LOCK DET	C2208 (LOWER)	B-6	WF-1	MAIN C.B.A. (C)
255	AVCC32	—	—	—	
256	T PHOTO	C2015 (UPPER)	A-6	WF-1	MAIN C.B.A. (F)
257	BATT D	CL1005	C-8	WF-1	MAIN C.B.A. (C)
258	S PHOTO	C2018 (UPPER)	A-6	WF-1	MAIN C.B.A. (F)
259	MIC AD1	RX2004-2	B-3	WF-1	MAIN C.B.A. (C)
260	MIC AD2	RX2004-4	B-3	WF-1	MAIN C.B.A. (C)
261	MIC AD3	RX2004-6	B-3	WF-1	MAIN C.B.A. (C)
262	AVSS	—	—	—	
263	VCR KEY1	C2022 (UPPER)	B-5	WF-1	MAIN C.B.A. (F)
264	CAM KEY1	C2020 (UPPER)	B-5	WF-1	MAIN C.B.A. (F)
265	NC	—	—	—	
266	BLC	R2051 (RIGHT)	B-7	WF-1	MAIN C.B.A. (F)
267	REG D3V DET	RX2004-8	B-3	WF-1	MAIN C.B.A. (C)
268	BATT REF	CL1101	B-3	WF-1	MAIN C.B.A. (F)
269	VCR KEY3	C2026 (UPPER)	B-6	WF-1	MAIN C.B.A. (F)
270	BATTERY	C2017 (LEFT)	B-8	WF-1	MAIN C.B.A. (F)
271	VCR KEY5	C2023 (LEFT)	B-8	WF-1	MAIN C.B.A. (F)
272	VCR KEY2	C2014 (UPPER)	A-7	WF-1	MAIN C.B.A. (F)
273	EXT MIC	R2052 (RIGHT)	B-7	WF-1	MAIN C.B.A. (F)
274	Y LEVEL	—	—	—	
275	NC	R2092 (UPPER)	A-7	WF-1	MAIN C.B.A. (F)
276	DEW	R2059 (LOWER)	B-7	WF-1	MAIN C.B.A. (F)
277	AMP DET	C2070 (LEFT)	B-4	WF-1	MAIN C.B.A. (C)
278	UNI REMO	C2025 (LEFT)	B-8	WF-1	MAIN C.B.A. (F)
279	WIDE DET	Q3506-1	C-4	WF-1	MAIN C.B.A. (C)
280	VREFL	—	—	—	
281	VREFH	—	—	—	

(C): COMPONENT SIDE (F): FOIL SIDE

Check Point of the IC2001

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
121	S/S SW	R2087 (RIGHT)	D-7	WF-1	MAIN C.B.A. (F)
122	POWER ON	QR2008-B	B-4	WF-1	MAIN C.B.A. (F)
123	CAM RTN	R344 (LEFT)	A-6	WF-1	MAIN C.B.A. (C)
124	RTN FLD	R353 (LEFT)	A-6	WF-1	MAIN C.B.A. (C)
125	MEGA REQ	R331 (UPPER)	B-7	WF-1	MAIN C.B.A. (C)
126	RST PUP	———	—	—	
127	E2 PROTECT	IC2006-6	B-3	WF-1	MAIN C.B.A. (C)
128	FLASH WP	CL2031	D-2	WF-1	MAIN C.B.A. (C)
129	DVCC32	———	—	—	
130	A3	RX3003-4	C-4	WF-1	MAIN C.B.A. (C)
131	NC	———	—	—	
132	A8	RX3004-2	C-4	WF-1	MAIN C.B.A. (C)
133	A7	RX3004-4	C-4	WF-1	MAIN C.B.A. (C)
134	A0	———	—	—	
135	A2	RX3003-2	C-4	WF-1	MAIN C.B.A. (C)
136	A12	RX3002-8	C-4	WF-1	MAIN C.B.A. (C)
137	A11	RX3002-6	C-4	WF-1	MAIN C.B.A. (C)
138	A6	RX3004-6	C-4	WF-1	MAIN C.B.A. (C)
139	A15	R3012 (RIGHT)	B-4	WF-1	MAIN C.B.A. (C)
140	A10	RX3002-4	C-4	WF-1	MAIN C.B.A. (C)
141	DVSS	———	—	—	
142	A14	R3016 (RIGHT)	C-4	WF-1	MAIN C.B.A. (C)
143	A5	RX3004-8	C-4	WF-1	MAIN C.B.A. (C)
144	DVCC33	———	—	—	
145	A1	RX36003-8	C-4	WF-1	MAIN C.B.A. (C)
146	MODE14	R2015 (UPPER)	C-6	WF-1	MAIN C.B.A. (F)
147	A13	R3017 (RIGHT)	C-4	WF-1	MAIN C.B.A. (C)
148	A16	———	—	—	
149	A4	RX3003-6	C-4	WF-1	MAIN C.B.A. (C)
150	A9	RX3002-2	C-4	WF-1	MAIN C.B.A. (C)
151	A17	———	—	—	
152	PHOTO SW	R2091 (RIGHT)	C-6	WF-1	MAIN C.B.A. (F)
153	TEST4	———	—	—	
154	D2	———	—	—	
155	STANDBY SW	R2020 (LOWER)	C-6	WF-1	MAIN C.B.A. (F)
156	CARD DET	R2025 (RIGHT)	C-6	WF-1	MAIN C.B.A. (F)
157	SD PROTECT	R2024 (RIGHT)	C-6	WF-1	MAIN C.B.A. (F)
158	TEST3	———	—	—	
159	D0	RL3019	C-1	WF-1	MAIN C.B.A. (C)
160	DVSS	———	—	—	
161	NC	———	—	—	
162	D1	———	—	—	
163	D6	———	—	—	
164	D3	———	—	—	
165	D5	———	—	—	
166	D4	———	—	—	
167	FVSS	———	—	—	
168	FVCC2	———	—	—	
169	D9	———	—	—	
170	TEST0	———	—	—	
171	D8	———	—	—	
172	D7	———	—	—	
173	D10	———	—	—	
174	D13	———	—	—	
175	D11	———	—	—	
176	D12	———	—	—	
177	DVCC33	———	—	—	
178	EVF BL	QR1411-2	E-2	WF-1	MAIN C.B.A. (F)
179	D15	———	—	—	
180	SHMF IMD	———	—	—	
181	DVSS	———	—	—	
182	XDUO CS	———	—	—	
183	XWEH	RL3021	C-2	WF-1	MAIN C.B.A. (C)
184	XREADY	RL3024	B-6	WF-1	MAIN C.B.A. (F)
185	XRE	RL3023	C-2	WF-1	MAIN C.B.A. (C)
186	FVSS	———	—	—	
187	FVCC2	———	—	—	
188	D14	———	—	—	
189	NC	———	—	—	
190	CCD STBY	QR102-B	C-8	WF-1	SUB C.B.A. (F)
191	CCD ON Ⓗ	CL1053	C-3	WF-1	MAIN C.B.A. (F)
192	LCD ON Ⓗ	CL1084	B-3	WF-1	MAIN C.B.A. (F)
193	XWEL	RL3022	C-2	WF-1	MAIN C.B.A. (C)
194	TEST2	———	—	—	
195	DVCC33	———	—	—	
196	DVCC2	———	—	—	
197	NC	———	—	—	
198	XRAM CS	———	—	—	
199	NC	———	—	—	
200	XTI	———	—	—	
201	CVCCH	———	—	—	
202	CAP1	———	—	—	
203	CAP2	———	—	—	
204	XT2	———	—	—	
205	JTAG	R2028 (RIGHT)	B-6	WF-1	MAIN C.B.A. (F)
206	JTAG	CL2007	B-7	WF-1	MAIN C.B.A. (F)
207	TMS	CL2002	B-7	WF-1	MAIN C.B.A. (F)
208	TRST	———	—	—	
209	TCK	CL2004	B-7	WF-1	MAIN C.B.A. (F)
210	DVCC34	———	—	—	
211	CVCC2	———	—	—	
212	X1	R2155 (LEFT)	B-6	WF-143	MAIN C.B.A. (F)
213	CVSS	———	—	—	
214	X2	R2155 (RIGHT)	B-6	WF-143	MAIN C.B.A. (F)
215	NC	———	—	—	
216	CASS DOWN	RX2009-1	B-4	WF-1	MAIN C.B.A. (C)
217	LCD BL	R1415 (RIGHT)	D-3	WF-1	MAIN C.B.A. (F)
218	SHMF INT	QR2001-C	B-6	WF-1	MAIN C.B.A. (F)
219	NC	———	—	—	
220	DUO INT3	IC2019-5	C-6	WF-1	MAIN C.B.A. (F)
221	DUO INT2	IC2018-2	B-6	WF-1	MAIN C.B.A. (F)
222	DUO INT1	IC2018-7	B-6	WF-1	MAIN C.B.A. (F)
223	DVSS	———	—	—	
224	HP DET Ⓛ	IC3301-64	E-4	WF-1	MAIN C.B.A. (F)
225	TIMER INT	RX2010-8	B-4	WF-1	MAIN C.B.A. (C)
226	NC	———	—	—	
227	DUO INTO	IC2018-5	B-6	WF-1	MAIN C.B.A. (F)
228	EXT Ⓗ	R3302 (LOWER)	D-4	WF-1	MAIN C.B.A. (F)
229	CR POWER	C2070 (LEFT)	B-4	WF-1	MAIN C.B.A. (C)
230	NC	———	—	—	
231	EJECT SW	RX2009-3	B-4	WF-1	MAIN C.B.A. (C)
232	NC	———	—	—	
233	ACCESS LED	QR2002-B	B-6	WF-1	MAIN C.B.A. (F)
234	OSD CS	IC2009-2	C-3	WF-1	MAIN C.B.A. (C)
235	POWER SW	RX2009-7	B-4	WF-1	MAIN C.B.A. (C)
236	OSD RST	IC2009-4	C-3	WF-1	MAIN C.B.A. (C)
237	NC	———	—	—	
238	SH RST	CL3403	E-3	WF-1	SUB C.B.A. (F)
239	EEP CS	CL2022	B-3	WF-160	MAIN C.B.A. (C)
240	DVCC34	———	—	—	

(C): COMPONENT SIDE (F):FOIL SIDE

Check Point of the IC2001

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
1	NC	———	—	—	
2	AVCC31	———	—	—	
3	AVSS	———	—	—	
4	DVCC2	———	—	—	
5	ENDIAN	———	—	—	
6	BOOT	R2140 (LOWER)	C-8	WF-1	MAIN C.B.A. (F)
7	PCTS3	———	—	—	
8	PCTS0	———	—	—	
9	INTLV	R2141 (LOWER)	C-8	WF-1	MAIN C.B.A. (F)
10	SDI DINT	———	—	—	
11	PCTS2	———	—	—	
12	SDAO TPC	———	—	—	
13	BW0	———	—	—	
14	/DBGE	———	—	—	
15	DCLK	———	—	—	
16	USB INT	———	—	—	
17	PCTS1	———	—	—	
18	SYSRDY	———	—	—	
19	DVSS	———	—	—	
20	TEST1	———	—	—	
21	BUSMD	R2074 (LEFT)	B-8	WF-1	MAIN C.B.A. 8F)
22	/DRESET	———	—	—	
23	TEST5	———	—	—	
24	RESET	C2064 (LOWER)	B-8	WF-1	MAIN C.B.A. (F)
25	PLLON	———	—	—	
26	FVCC2	———	—	—	
27	FVSS	———	—	—	
28	NM1	———	—	—	
29	BW1	———	—	—	
30	DVCC2	———	—	—	
31	DVCC31	———	—	—	
32	NC	———	—	—	
33	SBA SIF CLK	IC3301-15	E-4	WF-1	MAIN C.B.A. (F)
34	PHOTO2	R2038 (RIGHT)	C-8	WF-1	MAIN C.B.A. (F)
35	NC	———	—	—	
36	SBA CS	IC-3301-14	E-4	WF-217	MAIN C.B.A. (F)
37	VTR TEST Ⓛ	R2036 (LEFT)	C-8	WF-1	MAIN C.B.A. (F)
38	SBA SIF DTI	R2177 (RIGHT)	C-8	WF-1	MAIN C.B.A. (F)
39	RPLUG Ⓛ	R2083 (LEFT)	B-8	WF-1	MAIN C.B.A. (F)
40	SBA SIF DTO	R2177 (LEFT)	C-8	WF-1	MAIN C.B.A. (F)
41	EXT 5V SW	QR3502-B	C-6	WF-1	MAIN C.B.A. (F)
42	S PLUG	R2084 (LOWER)	C-8	WF-1	MAIN C.B.A. (F)
43	DOOR OPEN	R2048 (LEFT)	C-8	WF-1	MAIN C.B.A. (F)
44	SYNC DET	RX2006-5	D-8	WF-1	MAIN C.B.A. (F)
45	FVCC3	———	—	—	
46	FVSS	———	—	—	
47	DVSS	———	—	—	
48	LCD RVS SW	R2019 (LOWER)	C-8	WF-1	MAIN C.B.A. (F)
49	SIF P SAVE	———	—	—	
50	BRIGHT ON	R2049 (LEFT)	C-8	WF-1	MAIN C.B.A. (F)
51	LCD OPEN SW	R2158 (LOWER)	C-8	WF-1	MAIN C.B.A. (F)
52	AV PLUG	R2085 (LOWER)	C-8	WF-1	MAIN C.B.A. (F)
53	USB DET	QR2003-C	D-8	WF-1	MAIN C.B.A. (F)
54	BL BRIGHT Ⓗ	QR913-B	B-8	WF-1	MONITOR C.B.A. (F)
55	ARB	———	—	—	
56	SIF CS	———	—	—	
57	USB DPBIAS	QR2004-B	D-8	WF-1	MAIN C.B.A. (F)
58	XRST	R2097 (LEFT)	C-8	WF-1	MAIN C.B.A. (F)
59	NC	———	—	—	
60	SH COM TRG	CL3424	F-3	WF-1	SUB C.B.A. (F)

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
61	EVF HL	R2043 (LEFT)	C-8	WF-1	MAIN C.B.A. (F)
62	INPUT SEL	IC3503-2	D-5	WF-1	MAIN C.B.A. (F)
63	SHM BOOT REQ	R3420 (UPPER)	C-9	WF-1	SUB C.B.A. (C)
64	CAM SEND END	———	—	—	
65	NC	———	—	—	
66	NC	———	—	—	
67	MEMO END	R326 (RIGHT)	A-6	WF-1	SUB C.B.A. (C)
68	HOST REQ	IC2019-7	C-6	WF-1	MAIN C.B.A. (F)
69	EVF ON Ⓗ	R1423 (RIGHT)	E-2	WF-1	MAIN C.B.A. (F)
70	DVCC32	———	—	—	
71	NC	———	—	—	
72	NC	———	—	—	
73	HOST ACK	R2072 (LOWER)	C-7	WF-1	MAIN C.B.A. (F)
74	NC	———	—	—	
75	VTR T	R380 (UPPER)	C-5	WF-1	SUB C.B.A. (C)
76	LCD CS	IC901-40	D-6	WF-1	MONITOR C.B.A. (F)
77	NC	———	—	—	
78	NC	———	—	—	
79	S PHOTO SW2	R2112 (LOWER)	C-7	WF-1	MAIN C.B.A. (F)
80	T PHOTO SW1	R2109 (LOWER)	C-7	WF-1	MAIN C.B.A. (F)
81	MIC CLK	RX2004-4	B-3	WF-1	MAIN C.B.A. (C)
82	MIC DATA	RX2004-6	B-3	WF-1	MAIN C.B.A. (C)
83	DVSS	———	—	—	
84	REMOCON	R2017 (LEFT)	D-7	WF-131	MAIN C.B.A. (F)
85	S PHOTO SW1	R2111 (LOWER)	C-7	WF-1	MAIN C.B.A. (F)
86	PS Ⓛ	IC1001-9	C-3	WF-1	MAIN C.B.A. (F)
87	T PHOTO SW2	R2110 (LOWER)	C-7	WF-1	MAIN C.B.A. (F)
88	CAM D3 OFF	R301 (LEFT)	E-5	WF-1	SUB C.B.A. (C)
89	SS DET	R360 (LOWER)	C-7	WF-1	SUB C.B.A. (C)
90	QUICKST	R381 (UPPER)	C-5	WF-1	SUB C.B.A. (C)
91	CAMO	R383 (RIGHT)	C-6	WF-1	SUB C.B.A. (C)
92	NC	———	—	—	
93	LCD EVF SCK	IC901-41	D-6	WF-163	MONITOR C.B.A. (F)
94	ERF CLK	CL2025	B-3	WF-163	MAIN C.B.A. (C)
95	ERF DO	R2080 (UPPER)	C-7	WF-164	MAIN C.B.A. (F)
96	ERF DI	R2080 (LOWER)	C-7	WF-165	MAIN C.B.A. (F)
97	CAM RST	R2093 (LEFT)	D-7	WF-1	MAIN C.B.A. (F)
98	LCD EVF DI	R2096 (LEFT)	C-7	WF-164	MAIN C.B.A. (F)
99	SH COM CLK	CL3425	F-3	WF-163	SUB C.B.A. (F)
100	DVCC2	———	—	—	
101	DVCC32	———	—	—	
102	LCD EVF DO	R2096 (RIGHT)	C-7	WF-164	MAIN C.B.A. (F)
103	PC RST	C2047 (LEFT)	C-7	WF-1	MAIN C.B.A. (F)
104	SH COM DI	CL3421	F-3	WF-165	SUB C.B.A. (F)
105	232C RXD	R2089 (UPPER)	D-7	WF-1	MAIN C.B.A. (F)
106	232C TXD	CL2026	A-7	WF-1	MAIN C.B.A. (F)
107	SH COM DO	CL3422	E-2	WF-164	SUB C.B.A. (F)
108	CPU VCC SW	QR2010-B	C-3	WF-1	MAIN C.B.A. (C)
109	V C DATA	R341 (LOWER)	A-5	WF-72	SUB C.B.A. (C)
110	WINK END	———	—	—	
111	C V DATA	———	—	—	
112	MIC ON	R2133 (UPPER)	C-5	WF-1	MAIN C.B.A. (F)
113	REC REV	R2058 (RIGHT)	C-6	WF-1	MAIN C.B.A. (F)
114	RTC CS	IC2601-5	A-2	WF-131	SIDE L C.B.A. (F)
115	SNS LED	Q2003-B	C-7	WF-161	MAIN C.B.A. (F)
116	CAM SCK	R306 (LEFT)	A-5	WF-234	SUB C.B.A. (C)
117	DVSS	———	—	—	
118	OSD SCK	IC2009-1	C-3	WF-1	MAIN C.B.A. (C)
119	OSD DO	IC2009-3	C-3	WF-1	MAIN C.B.A. (C)
120	SH SLEEP	CL3423	F-4	WF-1	SUB C.B.A. (F)

(C): COMPONENT SIDE (F):FOIL SIDE

Check Point of the IC305

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
1	VDD B	———	—	—	
2	SENS SW	———	—	—	
3	CAM SCLK	R339 (RIGHT)	A-5	WF-234	SUB C.B.A. (C)
4	VSS	———	—	—	
5	ND PWMB	R756 (UPPER)	B-6	WF-1	SUB C.B.A. (F)
6	VDD	———	—	—	
7	OSC OUT	———	—	—	
8	AD VREF	———	—	—	
9	NC	———	—	—	
10	NC	———	—	—	
11	C V DATA	———	—	—	
12	V C DATA	R341 (UPPER)	A-5	WF-72	SUB C.B.A. (C)
13	CAM RTN	R345 (RIGHT)	A-6	WF-1	SUB C.B.A. (C)
14	OSC IN	IC301-5	C-5	WF-211	SUB C.B.A. (F)
15	VSS	———	—	—	
16	RESET	C329 (LEFT)	A-6	WF-1	SUB C.B.A. (C)
17	NC	R323 (LEFT)	A-6	WF-1	SUB C.B.A. (C)
18	VSS BU	———	—	—	
19	VDD BU	———	—	—	
20	MF LED	QR301-B	A-6	WF-1	SUB C.B.A. (C)
21	RTN FLD	R356 (RIGHT)	A-6	WF-180	SUB C.B.A. (C)
22	OIS DA SCK	R352 (LEFT)	A-6	WF-149	SUB C.B.A. (C)
23	NC	———	—	—	
24	CAM SEND END	———	—	—	
25	CHA END	R338 (LEFT)	A-7	WF-1	SUB C.B.A. (C)
26	SHOE SDO	D304-K	A-7	WF-1	SUB C.B.A. (C)
27	OIS DA SDO	R367 (LEFT)	A-6	WF-140	SUB C.B.A. (C)
28	OIS DA LD	———	—	—	
29	NC	———	—	—	
30	FCP CNT	R731 (LOWER)	E-2	WF-1	SUB C.B.A. (F)
31	MEGA REQUEST	R330 (UPPER)	B-7	WF-1	SUB C.B.A. (C)
32	CG SO	IC101-9	D-5	WF-23	SUB C.B.A. (F)
33	CG CLK	R142 (LEFT)	C-7	WF-1	SUB C.B.A. (F)
34	BST	R308 (UPPER)	B-7	WF-1	SUB C.B.A. (C)
35	SHOE SDI	D304-A	A-7	WF-1	SUB C.B.A. (C)
36	EVDD	———	—	—	
37	E2 CS	———	—	—	
38	NC	———	—	—	
39	RW SEL	———	—	—	
40	SHOE SCK	———	—	—	
41	EVSS	———	—	—	
42	E2 RST	IC307-7	B-3	WF-1	SUB C.B.A. (C)
43	LED CONT	QR302-B	B-7	WF-1	SUB C.B.A. (C)
44	E2 RB	IC307-3	B-7	WF-1	SUB C.B.A. (C)
45	LSTBY	IC702-26	B-4	WF-1	SUB C.B.A. (F)
46	CG CS	IC101-10	D-5	WF-149	SUB C.B.A. (F)
47	ASP1 CS	IC104-33	C-5	WF-1	SUB C.B.A. (C)
48	LEN CS	IC702-1	B-4	WF-149	SUB C.B.A. (F)
49	MEMO END	R326 (LEFT)	A-6	WF-1	SUB C.B.A. (C)
50	ASP2 CS	IC105-33	C-4	WF-22	SUB C.B.A. (C)
51	ASP3 CS	IC106-33	C-3	WF-227	SUB C.B.A. (C)
52	SS DET	R360 (UPPER)	C-7	WF-1	SUB C.B.A. (C)
53	SHOE ON Ⓗ	———	—	—	
54	F OPEN	R303 (LOWER)	C-7	WF-1	SUB C.B.A. (C)
55	RE Ⓗ	———	—	—	
56	WE Ⓛ	R336 (LOWER)	C-6	WF-203	SUB C.B.A. (C)
57	FUP Ⓗ	———	—	—	
58	DAS	R316 (LOWER)	D-7	WF-203	SUB C.B.A. (C)
59	WINK END	———	—	—	
60	Z ABS	R335 (LOWER)	C-7	WF-1	SUB C.B.A. (C)
61	MAD0	———	—	—	
62	NC	———	—	—	
63	FLMD1/MAD5	R305 (LOWER)	C-6	WF-1	SUB C.B.A. (C)
64	MAD1	———	—	—	
65	MAD2	———	—	—	
66	MAD8	———	—	—	
67	EVSS	———	—	—	
68	MAD4	———	—	—	
69	MAD11	———	—	—	
70	MAD3	———	—	—	
71	MAD7	———	—	—	
72	MAD6	———	—	—	
73	MAD14	———	—	—	
74	FLMD0	R372 (LOWER)	C-6	WF-1	SUB C.B.A. (C)
75	MAD9	———	—	—	
76	EVDD	———	—	—	
77	MAD10	———	—	—	
78	MAD12	———	—	—	
79	MAD13	———	—	—	
80	MAD15	———	—	—	
81	CAM0	R384 (LEFT)	C-6	WF-1	SUB C.B.A. (C)
82	IND SDI	D303-A	C-6	WF-1	SUB C.B.A. (C)
83	IND SDO	D303-K	C-6	WF-1	SUB C.B.A. (C)
84	INST ST	R382 (LOEWR)	C-5	WF-1	SUB C.B.A. (C)
85	IND SCK	IC307-6	B-3	WF-1	SUB C.B.A. (C)
86	MF RING2	R319 (UPPER)	B-5	WF-1	SUB C.B.A. (C)
87	AFST	CL305	C-6	WF-1	SUB C.B.A. (C)
88	VTR T	R379 (LOWER)	C-5	WF-1	SUB C.B.A. (C)
89	EVR SBI	R311 (LOWER)	C-5	WF-1	SUB C.B.A. (C)
90	CAM T	R312 (LOWER)	C-5	WF-1	SUB C.B.A. (C)
91	EVR SBO	R368 (LOWER)	C-5	WF-1	SUB C.B.A. (C)
92	MVD	———	—	—	
93	TRIG END	IC7001-1	A-3	WF-1	SUB C.B.A. (F)
94	EVR SCK	R310 (LOWER)	C-5	WF-1	SUB C.B.A. (C)
95	FLS DLY	R378 (LOWER)	C-5	WF-170	SUB C.B.A. (C)
96	BEND	———	—	—	
97	NC	———	—	—	
98	A COM P	R370 (UPPER)	B-5	WF-1	SUB C.B.A. (C)
99	NC	———	—	—	
100	B COM P	R371 (UPPER)	B-5	WF-1	SUB C.B.A. (C)
101	V1 V2	R332 (RIGHT)	C-7	WF-1	SUB C.B.A. (C)
102	CHARGE	R7022 (LOWER)	B-3	WF-1	SUB C.B.A. (F)
103	GYRO X	———	—	—	
104	MD OPEN	R775 (RIGHT)	B-3	WF-1	SUB C.B.A. (C)
105	MF RING1	———	—	—	
106	SHOE DET	R317 (UPPER)	B-5	WF-1	SUB C.B.A. (C)
107	NC	———	—	—	
108	ZM B	———	—	—	
109	ZM A	———	—	—	
110	FM B	C322 (UPPER)	B-5	WF-1	SUB C.B.A. (C)
111	FM A	C321 (UPPER)	B-5	WF-1	SUB C.B.A. (C)
112	X POS	———	—	—	
113	Y POS	———	—	—	
114	ND FNO	C320 (RIGHT)	B-5	WF-1	SUB C.B.A. (C)
115	FNO	C312 (LOWER)	B-5	WF-1	SUB C.B.A. (C)
116	MREF	IC702-5	B-4	WF-1	SUB C.B.A. (F)
117	GYRO Y	———	—	—	
118	ZAD	R347 (RIGHT)	A-5	WF-1	SUB C.B.A. (C)
119	AD VREF	———	—	—	
120	IR	C317 (LOWER)	B-5	WF-1	SUB C.B.A. (C)

(C): COMPONENT SIDE (F):FOIL SIDE

Check Point of the IC303

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
241	VDD 18D	———	—	—	
242	VSS	———	—	—	
243	TEST IN0	———	—	—	
244	TEST IN1	———	—	—	
245	TEST IN2	———	—	—	
246	TEST IN3	———	—	—	
247	TEST IN4	———	—	—	
248	VDD VTR	———	—	—	
249	VSS	———	—	—	
250	VDD CPU	———	—	—	
251	VSS	———	—	—	
252	V1 V2	———	—	—	
253	CE	R332 (LEFT)	C-7	WF-1	SUB C.B.A. (C)
254	RE	———	—	—	
255	RW	———	—	—	
256	NC	———	—	—	

(C): COMPONENT SIDE (F): FOIL SIDE

Check Point of the IC303

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
121	Y OUT4	———	—	—	
122	Y OUT5	———	—	—	
123	VDD VTR	———	—	—	
124	VSS	———	—	—	
125	Y OUT6	———	—	—	
126	Y OUT7	———	—	—	
127	C OUT0	RL3015	D-6	WF-1	MAIN C.B.A. (C)
128	C OUT1	———	—	—	
129	C OUT2	———	—	—	
130	C OUT3	———	—	—	
131	VDD VTR	———	—	—	
132	VSS	———	—	—	
133	VDD1	———	—	—	
134	C OUT4	———	—	—	
135	C OUT5	———	—	—	
136	C OUT6	———	—	—	
137	C OUT7	———	—	—	
138	INH	RL3017	D-6	WF-1	MAIN C.B.A. (C)
139	INV	RL3018	D-6	WF-1	MAIN C.B.A. (C)
140	VDD VTR	———	—	—	
141	VSS	———	—	—	
142	VTR 45M	RL3016	D-6	WF131	MAIN C.B.A. (C)
143	BUSY	———	—	—	
144	MEGA PIX	———	—	—	
145	DSTBO	———	—	—	
146	BLK END	———	—	—	
147	NC	———	—	—	
148	SCAN ST	———	—	—	
149	TMS	CL312	E-6	WF-1	SUB C.B.A. (C)
150	TDI	CL306	E-6	WF-1	SUB C.B.A. (C)
151	TCK	CL311	E-6	WF-1	SUB C.B.A. (C)
152	TRST	R322 (LEFT)	E-6	WF-1	SUB C.B.A. (C)
153	TDO	CL309	E-6	WF-1	SUB C.B.A. (C)
154	TST0	———	—	—	
155	TST1	———	—	—	
156	TST2	———	—	—	
157	VDD1	———	—	—	
158	VDD 18D3	———	—	—	
159	VSS	———	—	—	
160	TST3	———	—	—	
161	TST4	———	—	—	
162	TST5	———	—	—	
163	TSTO0	———	—	—	
164	TSTO1	———	—	—	
165	TSTO2	———	—	—	
166	VDD VTR	———	—	—	
167	VSS	———	—	—	
168	TSTO3	———	—	—	
169	TSTO4	———	—	—	
170	TSTO5	———	—	—	
171	VDD 33D	———	—	—	
172	VSS	———	—	—	
173	VDD 18D	———	—	—	
174	TSTO6	———	—	—	
175	TSTO7	———	—	—	
176	TSTO8	———	—	—	
177	VDD VTR	———	—	—	
178	VSS	———	—	—	
179	TSTO9	———	—	—	
180	TSTO10	———	—	—	

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
181	TSTO11	———	—	—	
182	TSTO12	———	—	—	
183	TSTO13	———	—	—	
184	TSTO14	———	—	—	
185	VDD VTR	———	—	—	
186	VSS	———	—	—	
187	NC	———	—	—	
188	TSTO15	———	—	—	
189	TSTO16	———	—	—	
190	TSTO17	———	—	—	
191	TSTO18	———	—	—	
192	NC	———	—	—	
193	VDD 18D5	———	—	—	
194	TSTO19	———	—	—	
195	TSTO20	———	—	—	
196	VDD VTR	———	—	—	
197	VSS	———	—	—	
198	TSTO21	———	—	—	
199	TSTO22	———	—	—	
200	TSTO23	———	—	—	
201	TSTO24	———	—	—	
202	TSTO25	———	—	—	
203	TSTO26	———	—	—	
204	VDD VTR	———	—	—	
205	VSS	———	—	—	
206	TSTO27	———	—	—	
207	TSTO28	———	—	—	
208	TSTO29	———	—	—	
209	TSTO30	———	—	—	
210	TSTO31	———	—	—	
211	TSTO32	———	—	—	
212	VDD VTR	———	—	—	
213	VSS	———	—	—	
214	TSTO33	———	—	—	
215	TSTO34	———	—	—	
216	TSTO35	———	—	—	
217	TSTO36	———	—	—	
218	TSTO37	———	—	—	
219	VDD1	———	—	—	
220	VDD 18D6	———	—	—	
221	VSS	———	—	—	
222	TSTO38	———	—	—	
223	VDD VTR	———	—	—	
224	VSS	———	—	—	
225	TSTO39	———	—	—	
226	TSTO40	———	—	—	
227	TSTO41	———	—	—	
228	TSTO42	———	—	—	
229	TSTO43	———	—	—	
230	TSTO44	———	—	—	
231	VDD VTR	———	—	—	
232	VSS	———	—	—	
233	TSTO45	———	—	—	
234	TSTO46	———	—	—	
235	TSTO47	———	—	—	
236	TSTO48	———	—	—	
237	TSTO49	———	—	—	
238	TSTO50	———	—	—	
239	VDD 33D	———	—	—	
240	NC	———	—	—	

(C): COMPONENT SIDE (F):FOIL SIDE

Check Point of the IC303

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
1	VDD 18D1	———	—	—	
2	ASTB	R316 (UPPER)	D-7	WF-1	SUB C.B.A. (C)
3	DSTB WE	IC304-4	C-7	WF-128	SUB C.B.A. (C)
4	NC	———	—	—	
5	MAD B0	———	—	—	
6	MAD B1	———	—	—	
7	MAD B2	———	—	—	
8	MAD B3	———	—	—	
9	MAD B4	———	—	—	
10	MAD B5	R305 (UPPER)	C-6	WF-103	SUB C.B.A. (C)
11	MAD B6	———	—	—	
12	MAD B7	———	—	—	
13	MAD B8	———	—	—	
14	MAD B9	———	—	—	
15	MAD B10	———	—	—	
16	MAD B11	———	—	—	
17	MAD B12	———	—	—	
18	MAD B13	———	—	—	
19	MAD B14	———	—	—	
20	MAD B15	———	—	—	
21	BEND	———	—	—	
22	VSS	———	—	—	
23	VDD 18D2	———	—	—	
24	VDD1	———	—	—	
25	MVD	———	—	—	
26	NC	———	—	—	
27	POR	R315 (LEFT)	B-5	WF-1	SUB C.B.A. (C)
28	VDD CPU	———	—	—	
29	VSS	———	—	—	
30	VDD RGB	———	—	—	
31	VSS	———	—	—	
32	R IN0	IC104-36	C-5	WF-207	SUB C.B.A. (C)
33	R IN1	IC104-1	C-5	WF-207	SUB C.B.A. (C)
34	R IN2	IC104-2	C-5	WF-207	SUB C.B.A. (C)
35	R IN3	IC104-3	C-5	WF-207	SUB C.B.A. (C)
36	R IN4	IC104-4	C-5	WF-207	SUB C.B.A. (C)
37	R IN5	IC104-5	C-5	WF-207	SUB C.B.A. (C)
38	R IN6	IC104-6	C-5	WF-207	SUB C.B.A. (C)
39	R IN7	IC104-7	C-5	WF-207	SUB C.B.A. (C)
40	R IN8	IC104-8	C-5	WF-207	SUB C.B.A. (C)
41	R IN9	IC104-9	C-5	WF-39	SUB C.B.A. (C)
42	NC	———	—	—	
43	G IN0	IC105-36	C-4	WF-207	SUB C.B.A. (C)
44	G IN1	IC105-1	C-4	WF-207	SUB C.B.A. (C)
45	G IN2	IC105-2	C-4	WF-207	SUB C.B.A. (C)
46	G IN3	IC105-3	C-4	WF-207	SUB C.B.A. (C)
47	G IN4	IC105-4	C-4	WF-207	SUB C.B.A. (C)
48	G IN5	IC105-5	C-4	WF-207	SUB C.B.A. (C)
49	G IN6	IC105-6	C-4	WF-207	SUB C.B.A. (C)
50	G IN7	IC105-7	C-4	WF-93	SUB C.B.A. (C)
51	G IN8	IC105-8	C-4	WF-39	SUB C.B.A. (C)
52	G IN9	IC105-9	C-4	WF-39	SUB C.B.A. (C)
53	B IN0	IC106-36	C-3	WF-207	SUB C.B.A. (C)
54	B IN1	IC106-1	C-3	WF-207	SUB C.B.A. (C)
55	B IN2	IC106-2	C-3	WF-207	SUB C.B.A. (C)
56	B IN3	IC106-3	C-3	WF-207	SUB C.B.A. (C)
57	VDD1	———	—	—	
58	B IN4	IC106-4	C-3	WF-207	SUB C.B.A. (C)
59	B IN5	IC106-5	C-3	WF-127	SUB C.B.A. (C)
60	B IN6	IC106-6	C-3	WF-39	SUB C.B.A. (C)

CSP IC		Check Point		WF NO.	Remarks
Pin	Name				
61	B IN7	IC106-7	C-3	WF-39	SUB C.B.A. (C)
62	B IN8	IC106-8	C-3	WF-39	SUB C.B.A. (C)
63	B IN9	IC106-9	C-3	WF-1	SUB C.B.A. (C)
64	VDD RGB	———	—	—	
65	VSS	———	—	—	
66	VDD CAM	———	—	—	
67	VSS	———	—	—	
68	FCA	IC702-53	B-4	WF-140	SUB C.B.A. (F)
69	FCB	IC702-54	B-4	WF-140	SUB C.B.A. (F)
70	F2C	IC702-55	B-4	WF-140	SUB C.B.A. (F)
71	IRIS CLOSE	R743 (UPPER)	B-5	WF-1	SUB C.B.A. (F)
72	IRIS OPEN	R742 (LOWER)	B-5	WF-1	SUB C.B.A. (F)
73	PWM IRIS	R732 (LEFT)	B-6	WF-1	SUB C.B.A. (F)
74	NC	———	—	—	
75	PWM LIN	R720 (RIGHT)	C-4	WF-159	SUB C.B.A. (F)
76	PWM HZA	R721 (RIGHT)	C-4	WF-159	SUB C.B.A. (F)
77	PWM HZB	R702 (LEFT)	C-3	WF-159	SUB C.B.A. (F)
78	PWM ND	R759 (LOWER)	B-6	WF-1	SUB C.B.A. (F)
79	NC	———	—	—	
80	ZA COM P	———	—	—	
81	ZB COM P	———	—	—	
82	ZC COM P	———	—	—	
83	ZD COM P	———	—	—	
84	SIG	IC702-50	B-4	WF-1	SUB C.B.A. (F)
85	CCD HD	IC101-16	D-5	WF-1	SUB C.B.A. (F)
86	THD	IC101-16	D-5	WF-1	SUB C.B.A. (F)
87	CCD SHD	———	—	—	
88	TSVD	———	—	—	
89	TLHD	———	—	—	
90	TVD	IC101-17	D-5	WF-1	SUB C.B.A. (F)
91	YLVD	IC101-18	D-5	WF-1	SUB C.B.A. (F)
92	NC	———	—	—	
93	FCK	R145 (LOWER)	C-5	WF-1	SUB C.B.A. (F)
94	NC	———	—	—	
95	F2 CK	———	—	—	
96	NC	———	—	—	
97	SEL ON	———	—	—	
98	P DWON	R301 (RIGHT)	E-5	WF-1	SUB C.B.A. (C)
99	CLK RST	———	—	—	
100	MIN TEST	———	—	—	
101	NC	———	—	—	
102	VDD1	———	—	—	
103	PC IN	R145 (UPPER)	C-5	WF-1	SUB C.B.A. (F)
104	NC	———	—	—	
105	VCO OUT	———	—	—	
106	VCO HF	———	—	—	
107	VDD CAM	———	—	—	
108	VSS	———	—	—	
109	PLL VDD	———	—	—	
110	TOP OUT	———	—	—	
111	PLL VSS	———	—	—	
112	VDD VTR	———	—	—	
113	VSS	———	—	—	
114	DD FCK	R334 (LOWER)	E-5	WF-1	SUB C.B.A. (C)
115	NC	———	—	—	
116	NC	———	—	—	
117	Y OUT0	RL3030	D-6	WF-1	MAIN C.B.A. (C)
118	Y OUT1	———	—	—	
119	Y OUT2	———	—	—	
120	Y OUT3	———	—	—	

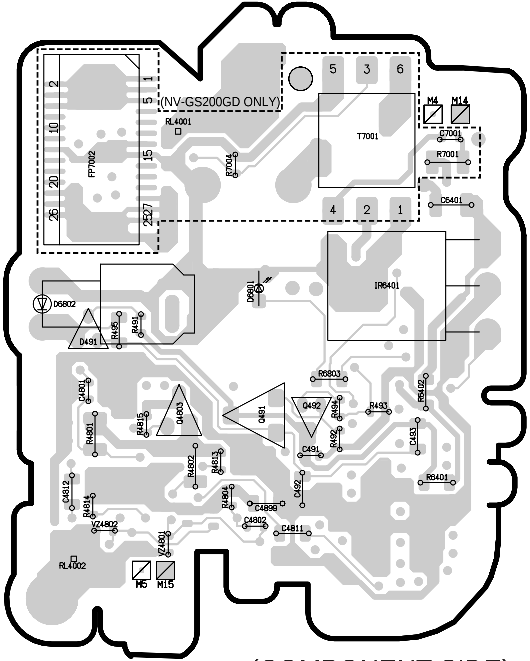
(C): COMPONENT SIDE   (F):FOIL SIDE

(VEP04854A:NV-GS200GD)
(VEP04854B:NV-GS120GD)

C

B

A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D491
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R494
R493
R6402
Q491
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R4802
R4813
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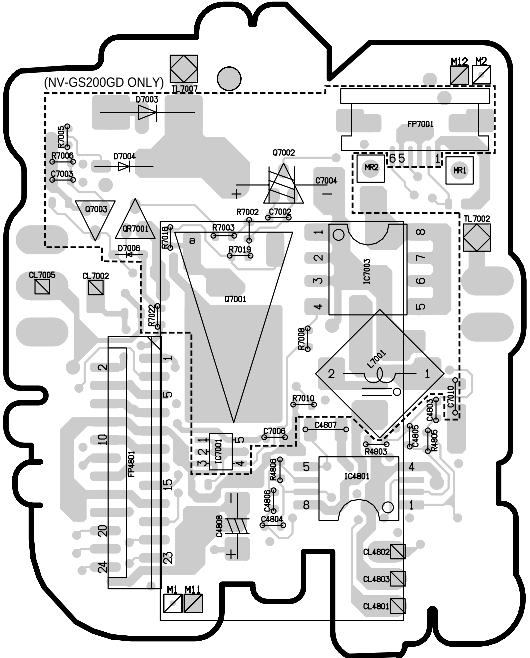
M15

(COMPONENT SIDE)


(NV-GS200GD ONLY)
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D7004
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QR7001
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CL7005
CL7002
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FP7001
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MR2
MR1
Q7002
C7004
R7002
C7002
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5
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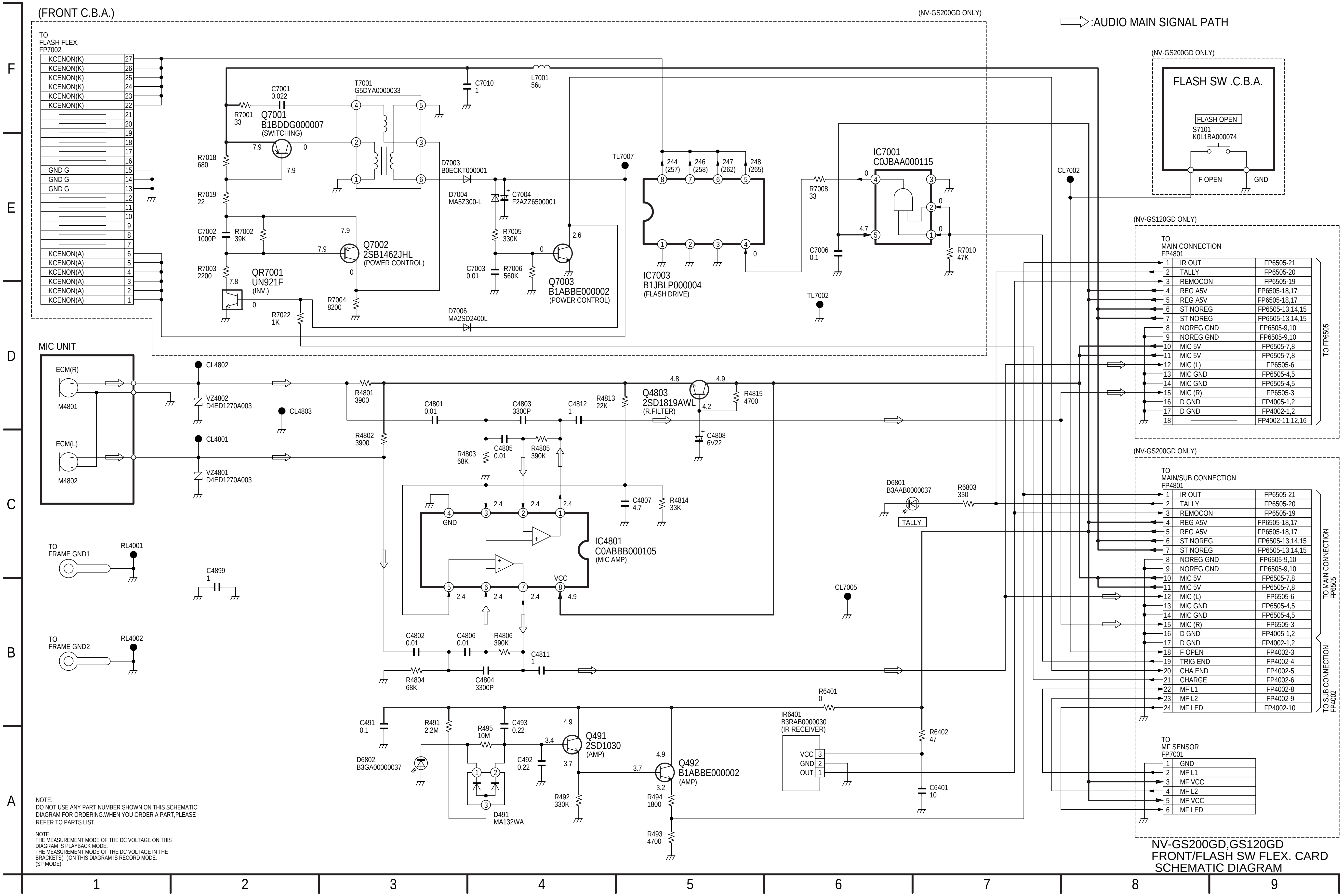
M1
M11

(FOIL SIDE)

NV-GS200GD,GS120GD
FRONT C.B.A.

1 2 3 4 5


(FRONT C.B.A.)
(NV-GS200GD ONLY)
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TO FLASH FLEX. FP7002
KCENON(K) 27
KCENON(K) 26
KCENON(K) 25
KCENON(K) 24
KCENON(K) 23
KCENON(K) 22
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GND G 15
GND G 14
GND G 13
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7
KCENON(A) 6
KCENON(A) 5
KCENON(A) 4
KCENON(A) 3
KCENON(A) 2
KCENON(A) 1
R7001 33
C7001 0.022
Q7001 B1BDDG000007 (SWITCHING)
T7001 G5DYA0000033
C7010 1
L7001 56u
R7018 680
R7019 22
C7002 1000P
R7002 39K
Q7002 2SB1462JHL (POWER CONTROL)
R7003 2200
QR7001 UN921F (INV.)
R7004 8200
R7022 1K
D7006 MA2SD2400L
D7003 B0ECKT000001
D7004 MA5Z300-L
C7004 F2AZZ6500001
R7005 330K
C7003 0.01
R7006 560K
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IC7003 B1JBLP000004 (FLASH DRIVE)
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246 (258)
247 (262)
248 (265)
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C7006 0.1
R7010 47K
TL7002
CL7002
FLASH SW .C.B.A.
FLASH OPEN
S7101 K0L1BA000074
F OPEN
GND
MIC UNIT
ECM(R)
M4801
ECM(L)
M4802
CL4802
VZ4802 D4ED1270A003
CL4803
CL4801
VZ4801 D4ED1270A003
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R4802 3900
C4801 0.01
C4803 3300P
C4812 1
R4813 22K
Q4803 2SD1819AWL (R.FILTER)
R4815 4700
C4808 6V22
R4803 68K
C4805 0.01
R4805 390K
C4807 4.7
R4814 33K
IC4801 C0ABBB000105 (MIC AMP)
GND
VCC
C4802 0.01
C4806 0.01
R4806 390K
C4811 1
R4804 68K
C4804 3300P
TO FRAME GND1
RL4001
C4899 1
TO FRAME GND2
RL4002
D6801 B3AAB0000037
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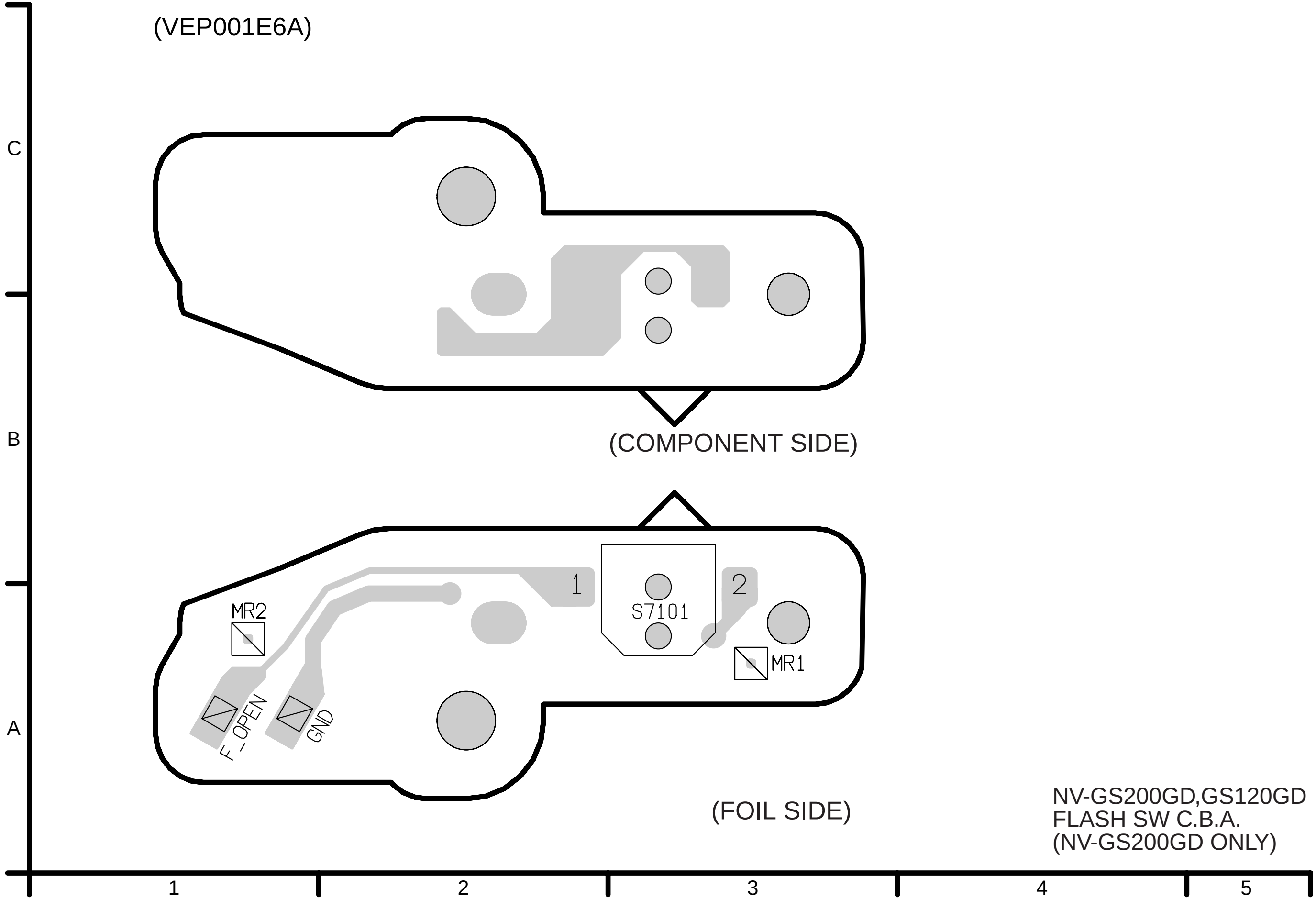
R6803 330
CL7005
R6401 0
IR6401 B3RAB0000030 (IR RECEIVER)
VCC 3
GND 2
OUT 1
R6402 47
C6401 10
C491 0.1
R491 2.2M
R495 10M
C493 0.22
D6802 B3GA00000037
C492 0.22
D491 MA132WA
Q491 2SD1030 (AMP)
R492 330K
Q492 B1ABBE000002 (AMP)
R494 1800
R493 4700
(NV-GS120GD ONLY)
TO MAIN CONNECTION FP4801
1 IR OUT FP6505-21
2 TALLY FP6505-20
3 REMOCON FP6505-19
4 REG A5V FP6505-18,17
5 REG A5V FP6505-18,17
6 ST NOREG FP6505-13,14,15
7 ST NOREG FP6505-13,14,15
8 NOREG GND FP6505-9,10
9 NOREG GND FP6505-9,10
10 MIC 5V FP6505-7,8
11 MIC 5V FP6505-7,8
12 MIC (L) FP6505-6
13 MIC GND FP6505-4,5
14 MIC GND FP6505-4,5
15 MIC (R) FP6505-3
16 D GND FP4005-1,2
17 D GND FP4002-1,2
18 FP4002-11,12,16
TO FP6505
(NV-GS200GD ONLY)
TO MAIN/SUB CONNECTION FP4801
1 IR OUT FP6505-21
2 TALLY FP6505-20
3 REMOCON FP6505-19
4 REG A5V FP6505-18,17
5 REG A5V FP6505-18,17
6 ST NOREG FP6505-13,14,15
7 ST NOREG FP6505-13,14,15
8 NOREG GND FP6505-9,10
9 NOREG GND FP6505-9,10
10 MIC 5V FP6505-7,8
11 MIC 5V FP6505-7,8
12 MIC (L) FP6505-6
13 MIC GND FP6505-4,5
14 MIC GND FP6505-4,5
15 MIC (R) FP6505-3
16 D GND FP4005-1,2
17 D GND FP4002-1,2
18 F OPEN FP4002-3
19 TRIG END FP4002-4
20 CHA END FP4002-5
21 CHARGE FP4002-6
22 MF L1 FP4002-8
23 MF L2 FP4002-9
24 MF LED FP4002-10
TO MAIN CONNECTION FP6505
TO SUB CONNECTION FP4002
TO MF SENSOR FP7001
1 GND
2 MF L1
3 MF VCC
4 MF L2
5 MF VCC
6 MF LED
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE.
(SP MODE)

NV-GS200GD,GS120GD FRONT/FLASH SW FLEX. CARD SCHEMATIC DIAGRAM

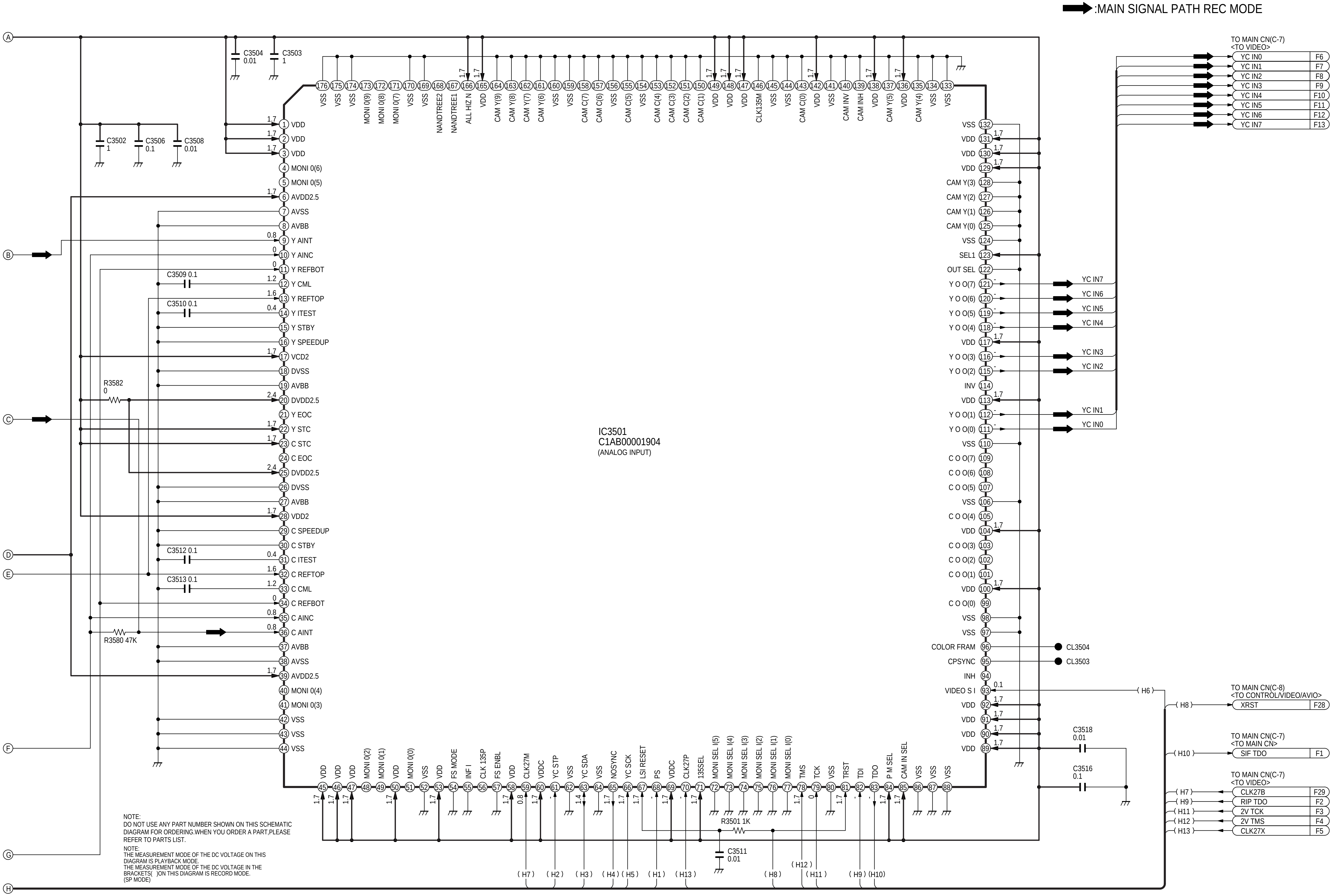
(VEP001E6A)


C
B
A
1
2
3
4
5
1
2
S7101
MR2
MR1
F_OPEN
GND

(COMPONENT SIDE)

(FOIL SIDE)

NV-GS200GD,GS120GD
FLASH SW C.B.A.
(NV-GS200GD ONLY)


:MAIN SIGNAL PATH REC MODE
A
B
C
D
E
F
G
H
I
C3504 0.01
C3503 1
C3502 1
C3506 0.1
C3508 0.01
C3509 0.1
C3510 0.1
R3582 0
C3512 0.1
C3513 0.1
R3580 47K
IC3501
C1AB00001904
(ANALOG INPUT)
1 VDD
2 VDD
3 VDD
4 MONI 0(6)
5 MONI 0(5)
6 AVDD2.5
7 AVSS
8 AVBB
9 Y AINT
10 Y AINC
11 Y REFBOT
12 Y CML
13 Y REFTOP
14 Y ITEST
15 Y STBY
16 Y SPEEDUP
17 VCD2
18 DVSS
19 AVBB
20 DVDD2.5
21 Y EOC
22 Y STC
23 C STC
24 C EOC
25 DVDD2.5
26 DVSS
27 AVBB
28 VDD2
29 C SPEEDUP
30 C STBY
31 C ITEST
32 C REFTOP
33 C CML
34 C REFBOT
35 C AINC
36 C AINT
37 AVBB
38 AVSS
39 AVDD2.5
40 MONI 0(4)
41 MONI 0(3)
42 VSS
43 VSS
44 VSS
45 VDD
46 VDD
47 VDD
48 MONI 0(2)
49 MONI 0(1)
50 VDD
51 MONI 0(0)
52 VSS
53 VDD
54 FS MODE
55 INF I
56 CLK 135P
57 FS ENBL
58 VDD
59 CLK27M
60 VDDC
61 YC STP
62 VSS
63 YC SDA
64 VSS
65 NOSYNC
66 YC SCK
67 LSI RESET
68 PS
69 VDDC
70 CLK27P
71 135SEL
72 MONI SEL I(5)
73 MONI SEL I(4)
74 MONI SEL I(3)
75 MONI SEL I(2)
76 MONI SEL I(1)
77 MONI SEL I(0)
78 TMS
79 TCK
80 VSS
81 TRST
82 TDI
83 TDO
84 P M SEL
85 CAM IN SEL
86 VSS
87 VSS
88 VSS
89 VDD
90 VDD
91 VDD
92 VDD
93 VIDEO S I
94 INH
95 CPSYNC
96 COLOR FRAM
97 VSS
98 VSS
99 C O O(0)
100 VDD
101 C O O(1)
102 C O O(2)
103 C O O(3)
104 VDD
105 C O O(4)
106 VSS
107 C O O(5)
108 C O O(6)
109 C O O(7)
110 VSS
111 Y O O(0)
112 Y O O(1)
113 VDD
114 INV
115 Y O O(2)
116 Y O O(3)
117 VDD
118 Y O O(4)
119 Y O O(5)
120 Y O O(6)
121 Y O O(7)
122 OUT SEL
123 SEL1
124 VSS
125 CAM Y(0)
126 CAM Y(1)
127 CAM Y(2)
128 CAM Y(3)
129 VDD
130 VDD
131 VDD
132 VSS
133 VSS
134 VSS
135 CAM Y(4)
136 VDD
137 CAM Y(5)
138 VDD
139 CAM INH
140 CAM INV
141 VSS
142 VDD
143 CAM C(0)
144 VSS
145 VSS
146 CLK135M
147 VDD
148 VDD
149 VDD
150 CAM C(1)
151 CAM C(2)
152 CAM C(3)
153 CAM C(4)
154 VSS
155 CAM C(5)
156 VSS
157 CAM C(6)
158 CAM C(7)
159 VSS
160 VSS
161 CAM Y(6)
162 CAM Y(7)
163 CAM Y(8)
164 CAM Y(9)
165 VDD
166 ALL HIZ N
167 NANDTREE1
168 NANDTREE2
169 VSS
170 VSS
171 MONI 0(7)
172 MONI 0(8)
173 MONI 0(9)
174 VSS
175 VSS
176 VSS
YC IN7
YC IN6
YC IN5
YC IN4
YC IN3
YC IN2
YC IN1
YC IN0
CL3504
CL3503
C3518 0.01
C3516 0.1
R3501 1K
C3511 0.01
(H7) (H2) (H3) (H4) (H5) (H1) (H13) (H8) (H12) (H11) (H9) (H10)
(H6)
TO MAIN CN(C-7)
<TO VIDEO>
YC IN0 F6
YC IN1 F7
YC IN2 F8
YC IN3 F9
YC IN4 F10
YC IN5 F11
YC IN6 F12
YC IN7 F13
TO MAIN CN(C-8)
<TO CONTROL/VIDEO/AVIO>
(H8) XRST F28
TO MAIN CN(C-7)
<TO MAIN CN>
(H10) SIF TDO F1
TO MAIN CN(C-7)
<TO VIDEO>
(H7) CLK27B F29
(H9) RIP TDO F2
(H11) 2V TCK F3
(H12) 2V TMS F4
(H13) CLK27X F5

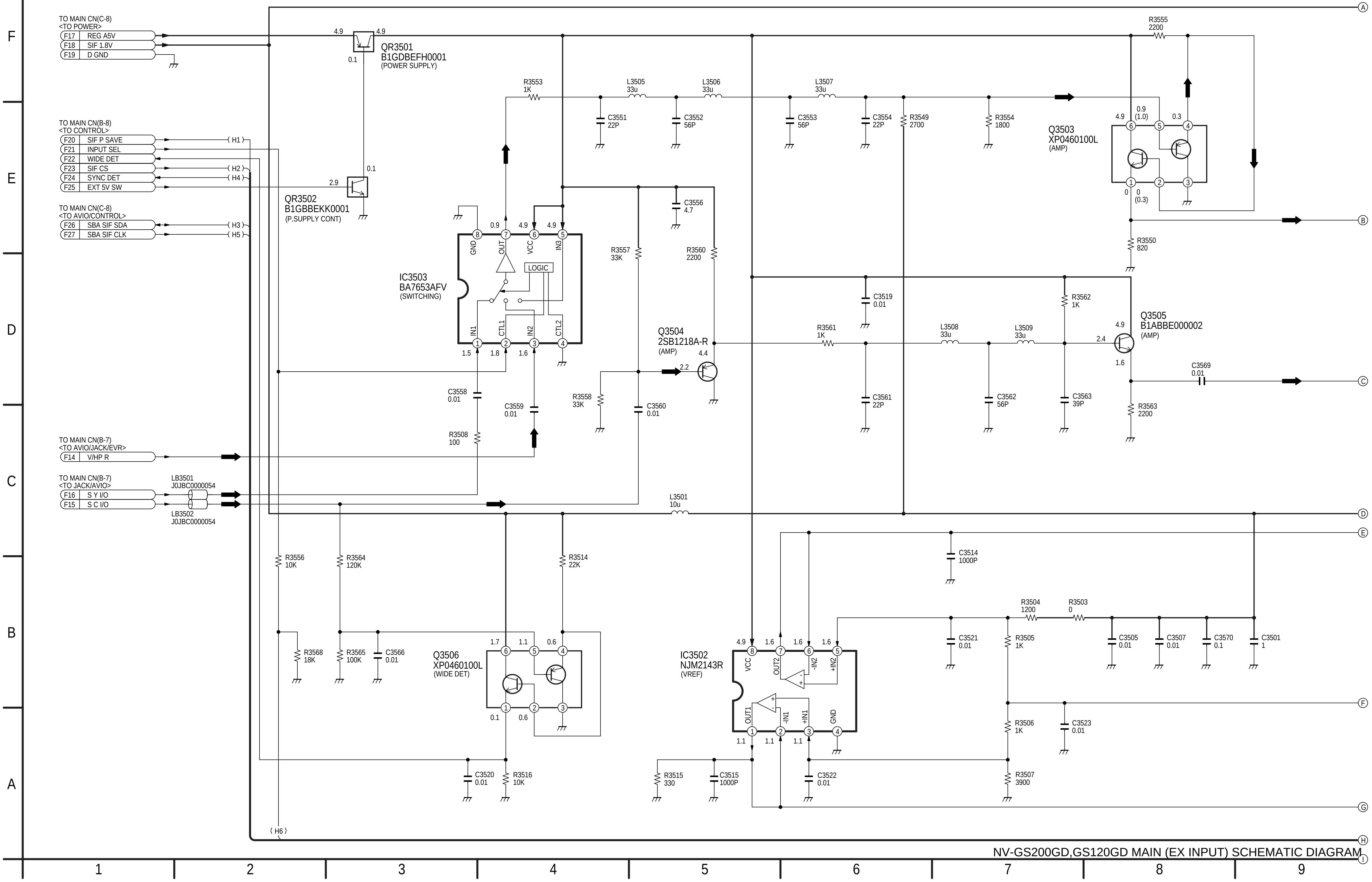
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE.
(SP MODE)

NV-GS200GD,GS120GD MAIN (EX INPUT) SCHEMATIC DIAGRAM

NV-GS200GD,GS120GD MAIN (EX INPUT) SCHEMATIC DIAGRAM

(MAIN C.B.A.)
REFER TO MAIN CONNECTION


TO MAIN CN(C-8)
<TO POWER>
F17 REG A5V
F18 SIF 1.8V
F19 D GND
TO MAIN CN(B-8)
<TO CONTROL>
F20 SIF P SAVE
F21 INPUT SEL
F22 WIDE DET
F23 SIF CS
F24 SYNC DET
F25 EXT 5V SW
TO MAIN CN(C-8)
<TO AVIO/CONTROL>
F26 SBA SIF SDA
F27 SBA SIF CLK
TO MAIN CN(B-7)
<TO AVIO/JACK/EVR>
F14 V/HP R
TO MAIN CN(B-7)
<TO JACK/AVIO>
F16 S Y I/O
F15 S C I/O
LB3501
J0JBC0000054
LB3502
J0JBC0000054
H1
H2
H3
H4
H5
H6
QR3501
B1GDBEFH0001
(POWER SUPPLY)
QR3502
B1GBBEKK0001
(P.SUPPLY CONT)
IC3503
BA7653AFV
(SWITCHING)
GND
OUT
VCC
IN3
IN1
CTL1
IN2
CTL2
LOGIC
Q3504
2SB1218A-R
(AMP)
Q3503
XP0460100L
(AMP)
Q3505
B1ABBE000002
(AMP)
Q3506
XP0460100L
(WIDE DET)
IC3502
NJM2143R
(VREF)
VCC
OUT2
-IN2
+IN2
OUT1
-IN1
+IN1
GND
R3553 1K
L3505 33u
L3506 33u
L3507 33u
C3551 22P
C3552 56P
C3553 56P
C3554 22P
R3549 2700
R3554 1800
R3555 2200
R3550 820
C3556 4.7
R3557 33K
R3560 2200
R3558 33K
C3560 0.01
C3558 0.01
C3559 0.01
R3508 100
C3519 0.01
R3561 1K
L3508 33u
L3509 33u
R3562 1K
C3561 22P
C3562 56P
C3563 39P
C3569 0.01
R3563 2200
L3501 10u
C3514 1000P
R3556 10K
R3564 120K
R3514 22K
R3568 18K
R3565 100K
C3566 0.01
C3520 0.01
R3516 10K
R3504 1200
R3503 0
C3521 0.01
R3505 1K
C3505 0.01
C3507 0.01
C3570 0.1
C3501 1
R3506 1K
C3523 0.01
R3507 3900
R3515 330
C3515 1000P
C3522 0.01
4.9
4.9
0.1
0.1
2.9
0.9
4.9
4.9
1.5
1.8
1.6
4.4
2.2
0.9
(1.0)
0.3
4.9
0
0
(0.3)
4.9
2.4
1.6
1.7
1.1
0.6
0.1
0.6
4.9
1.6
1.6
1.6
1.1
1.1
1.1
A
B
C
D
E
F
G
H
I
F
E
D
C
B
A
1
2
3
4
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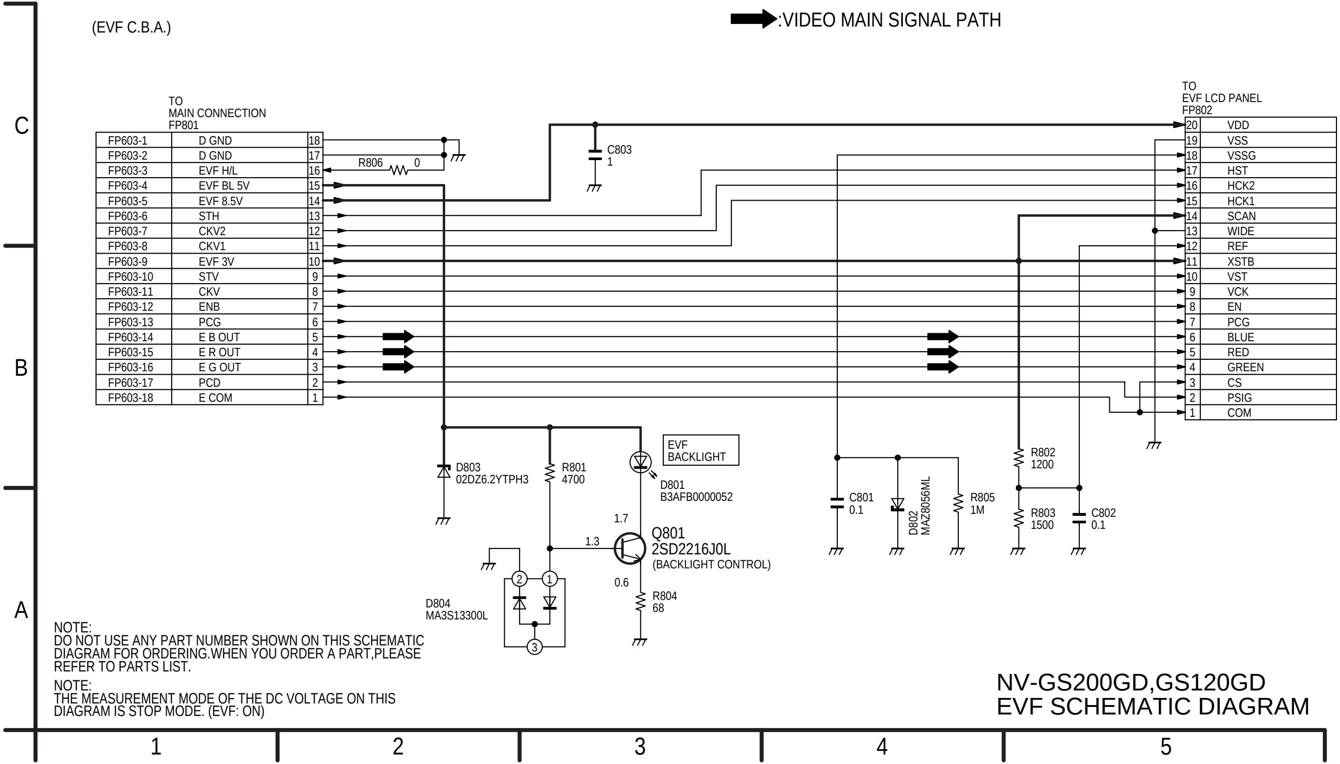
6
7
8
9

NV-GS200GD,GS120GD MAIN (EX INPUT) SCHEMATIC DIAGRAM

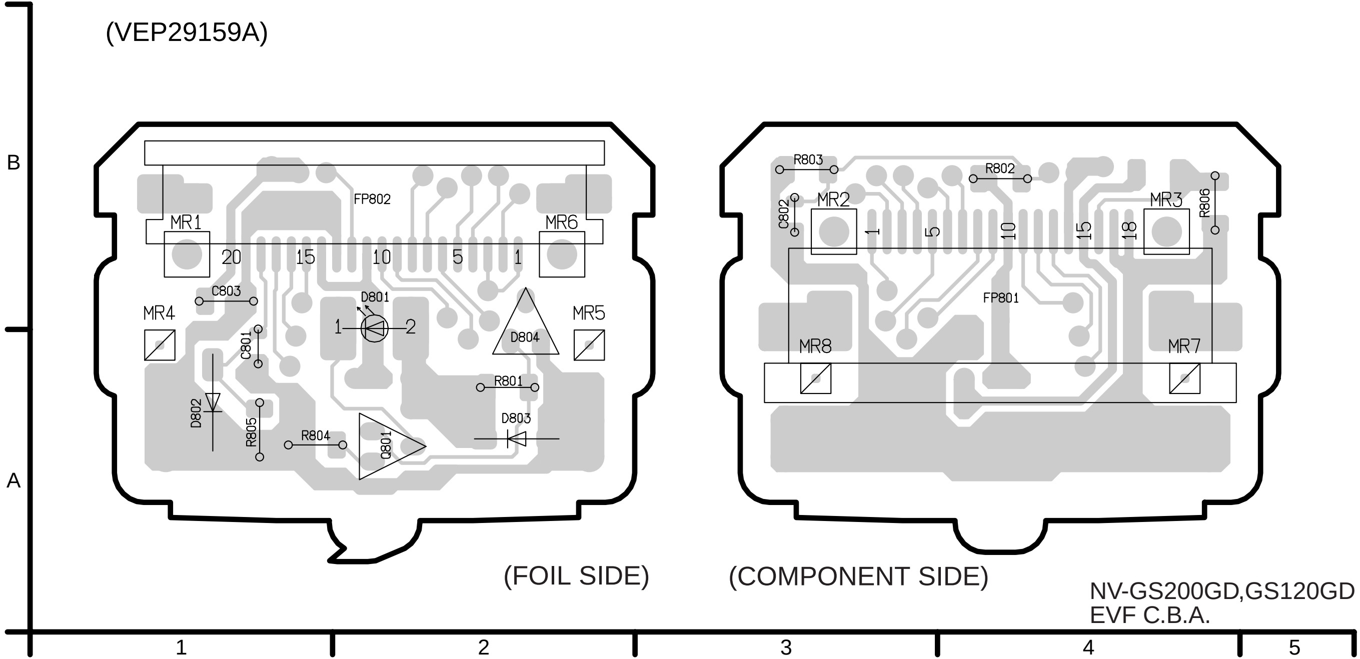

:VIDEO MAIN SIGNAL PATH
(EVF C.B.A.)
TO
MAIN CONNECTION
FP801
FP603-1 D GND 18
FP603-2 D GND 17
FP603-3 EVF H/L 16
FP603-4 EVF BL 5V 15
FP603-5 EVF 8.5V 14
FP603-6 STH 13
FP603-7 CKV2 12
FP603-8 CKV1 11
FP603-9 EVF 3V 10
FP603-10 STV 9
FP603-11 CKV 8
FP603-12 ENB 7
FP603-13 PCG 6
FP603-14 E B OUT 5
FP603-15 E R OUT 4
FP603-16 E G OUT 3
FP603-17 PCD 2
FP603-18 E COM 1
R806
0
C803
1
TO
EVF LCD PANEL
FP802
20 VDD
19 VSS
18 VSSG
17 HST
16 HCK2
15 HCK1
14 SCAN
13 WIDE
12 REF
11 XSTB
10 VST
9 VCK
8 EN
7 PCG
6 BLUE
5 RED
4 GREEN
3 CS
2 PSIG
1 COM
EVF
BACKLIGHT
D803
02DZ6.2YTPH3
R801
4700
D801
B3AFB0000052
1.7
Q801
2SD2216J0L
(BACKLIGHT CONTROL)
1.3
0.6
R804
68
D804
MA3S13300L
2
1
3
C801
0.1
D802
MAZ8056ML
R805
1M
R802
1200
R803
1500
C802
0.1
C
B
A
1
2
3
4
5

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE. (EVF: ON)

NV-GS200GD,GS120GD
EVF SCHEMATIC DIAGRAM

(VEP29159A)


B
A
MR1
MR6
FP802
20
15
10
5
1
C803
D801
1
2
MR4
MR5
C801
D804
R801
D802
R805
R804
Q801
D803
R803
R802
C802
MR2
1
5
10
15
18
MR3
R806
FP801
MR8
MR7
1
2
3
4
5

(FOIL SIDE) (COMPONENT SIDE)

NV-GS200GD,GS120GD
EVF C.B.A.

INITIAL/LOGO		ABBREVIATIONS
	VMODE	NTSC/PAL Select Switch
	VMVH	VH Filter Switching
	VORP	Video Overlap
	VRB	Voltage Refference Bottom
	VRBS	Voltage Refference Bottom Output
	VREF1R3V	Refference Voltage 1.3V
	VREF3R3V	Refference Voltage 3.3V
	VREFH	Refference Voltage High Side
	VREFL	Refference Voltage Low Side
	VRI	Refference Voltage Input
	VRO	Refference Voltage Output
	VRT	Voltage Refference Top
	VRTS	Voltage Refference Top Output
	VS	Switching Comparator
	VSS	Vertical Sync Signal
	VSSX	X Driver Power for Colour LCD
	VSSXY	X-Y Driver Power for Colour LCD
W	W/N	Mode Select for Window Mode
	W/N	Wide / Normal
	WAD	Write Address Enable
	WAE	Write Address Enable
	WAERAE	Write Address Enable
	WARI	Interrupt
	WB	White Balance
	WE	Write Enable
	WEM	Memory Write Enable
	WHD	Wide Horizontal Drive Pulse
	WIDE A	Wide Zoom
	WSB	B AGC Control
	WSR	R AGC Control
	WTV	Wide TV
X	XP	FG Logic Reset
Y	Y FM0-7	Y Field Memory 0-7
	YCE	Cylinder Error Code
	YGC	Y Gain Control
	YMO 0-7	Y Field Memory 0-7
	YNCST	Noize Canceller
	YNR	Luminance Noise Reduction
	YSDP 0-7	Digital Y Out 0-7
Z	Z.ENC	Zoom Encoder
	Z.MIC	Zoom Mic
	ZENC	Zoom Encoder Output
	ZMDIR	Zoom Drive
	ZMEN	Zoom Enable
	ZMT	Zoom Motor Tele Side
	ZMT (+)/(–)	Zoom Motor (+)/(–)
	ZMTER	Zoom Motor Tele Side
	ZMW	Zoom Motor Wide Side
	ZSW	Zoom Switch

INITIAL/LOGO		ABBREVIATIONS
	RENCF	Lens Control (Forward)
	RENCR	Lens Control (Reverse)
	RERASE	Rotary Erase Head
	RGBIV1-2	1V Inverted Signal 1-2
	RGO R/G OFF	Offset Voltage for AWT R
	RSF	Capstan Direction (Reverse / Stop / Forward)
	RST	Reset
	RSTB	R Strobe
	RSTPWD	Reset Power Down Input
	RSTR	Reset Read
	RSTW	Reset Write
	RT	Saw Tooth Terminal
	RVCO	Resister for Oscillation
	RW	Read Write
	RWAE	Read Write Enable
S	S PHOT	Supply Photo Transistor
	S/H	Sampling Hold
	S/S	Start/Stop
	SBD	Serial Data
	SBI	Serial Data Input
	SBO	Serial Data Output
	SBT	Serial Clock
	SCAN0-5	Key Scan 0-5
	SCK	Serial Clock
	SCR	Search
	SCR, S.C.R.	Still Cue Review
	SEG.	Segment
	SET	White Balance Set
	SH/IRIS	Shutter/Iris Control
	SHIFT	Capasitor for Phase Shift
	SI	Serial Data Input
	SIC	Shift In Clock Input
	SIOC	Serial In/Out Control
	SMCE	Shaffling Memory Chip Enable
	SMRS	Shaffling Memory Read Strobe
	SMWE	Shaffling Memory Write Enable
	SMWS	Shaffling Memory Read Strobe
	SNAP	Snap Shot
	SNS LED	Sensor LED
	SO	Serial Data Output
	SPA	ATF Smapling Pulse
	SPEN	8 Bit Shift Register Enable
	SPK	Speaker
	SPO	Reset for Switcing Power
	SPST	8 Bit Shift Register Strobe
	SREELP	Supply Reel Pulse
	SRT	Start
	SSA	Start Sync block Area
	SSW	Select Signal for Low Pass Filter
	ST5V	Safety Tab 5V
	STAB	Safety Tab Switch
	STB	Stand by Signal
	STB	Strobe
	SWB	Switching Pre-Drive Pulse
	SYL EC	Cylinder Torque Control
	SYL FG	Cylinder FG
T	T PHOT	Take-up Photo Transistor
	TBC	Time Base Conntrol
	TFT	Thim Film Transistor
	TH	Thermostat for Battery
	TI	Test Mode Select
	TL	Torque Limit
	TM	Sub Code
	TMD	Sub Code Data
	TRE	Tracking Error Signal
	TREEL(P)	Take-up Reel (Pulse)
	TRFIX	Tracking Fix
	TRIWAVE	Tracking Wave
	TRP	Tracking Position
	TRP	Trap
	TSR	Head Switching Refference
	TST	Time Scale Transfer
U	U/V SEL	R-Y/B-Y Select Signal
	UNLOAD	Un-Loading
	UNRE	Microprocessor Read Enable
	UNWE	Microprocessor Write Enable
	UV	R-Y/B-Y
	UV SEL	R-Y/B-Y Select Signal
V	V1-V4	V. CCD Drive Pulse
	VB	VH Filter Switching
	VCE	Power Terminal
	VCNTL	Video Control
	VCO	Voltage Control Oscillator
	VCP	Shift Clock Output for Vertical Drive
	VCTLD	Video Control
	VCTRL	Voltage Charge Control
	VD	Vertical Drive Pulse
	VDDX	X Drive Power for Colour LCD
	VDDXY	XY Drive Power for Colour LCD
	VDDY	Y Drive Power for Colour LCD
	VDREC	Video Delayed Rec
	Vgg	Voltage for Gate IC
	Vgl	Gate off Voltage
	VID	Video Signal Out
	VIN	Video In
	VITC	Vertical Interval Time Code
	VITERBI	One of Signal Detection Method
	VL	Low Voltage
	VLC	Variable Length Cording
	VLOCKP	Artificial Sync Pulse
	VLP	Artificial Sync Pulse
	VM	Motor Voltage
	VMD	Velocity Mode Data
	VMD1-3	Electric Shutter Mode

INITIAL/LOGO		ABBREVIATIONS
	LVL	LPF Switch for Auto Focus
M	M1-3	Motor Coil Terminal 1 to 3
	MA0-5	Microprocessor Address Data 0-5
	Mbps	Megahertz Bit Per Second
	MD	Modulation
	MD0-7	Microprocessor Data 0-7
	MDT0-7	Microprocessor Data 0-7
	ME (TAPE)	Metal Evaporated (Tape)
	MENB	Focus Motor Enable
	MFF	Manual Focus Far
	MFN	Manual Focus Near
	MHSYNC	Monitor Horizontal Sync Signal
	MIC	Memory In Cassette
	MIG	Meta In Gap
	MIX N.R.D.	Non Rec Data Mix
	MOD	Modulation
	MOUT	Mic Out
	MP (TAPE)	Metal Particle (Tape)
	MPEG	Moving Picture Image Cording Experts Group
	MPEG2	Moving Picture Image Cording Experts Group Phase 2
	MRST	Focus Motor Reset
	MSB	Most Signal Bit
	MVSYNC	Monitor Vertical Sync Signal
N	N/F	Near/Far Focus
	N/P	NTSC/PAL
	NB1-3	Base for NPN Transistor
	NC	No Connection
	NC1-3	Corrector of NPN Transistor
	NCLR	Power On Reset
	NCP1	Clamp Pulse
	NCP2+VDH	Clamp Pulse + Horizontal Drive Pulse
	NCP2+VDM	Clamp Pulse + Gate Pulse
	NDE	Non Liner De-Emphasis
	NE	Emitor of NPN Transistor
	NLE	Non Liner Emphasis
	NR	Noise Reduction
	NRD	Non Rec Data
	NRD BLK	Non Rec Data Blanking
	NRD CLK	No Rec Data Clock
	NRE	Read Enable Input (Low Active)
	NWE	Write Enable (Low Active)
O	OB	Optical Black
	OBCNT	Optical Black Control
	OBREF	Reference Voltage for Optical Black Control
	OE	Output Enable
	OFH	Horizontal Counted Down Clock Signal (Reference)
	OFS	Offset
	OP	Operation AMP Output
	OSD	ON Screen Display
	OVL	Overlap Pulse
	OZ	Optical Zoom
P	P SW	Power Switch
	PB1-3	PNP Base 1-3
	PBCTL	Play Back Control
	PBCTL	Pre-Branking Control
	PBH	Head Amp Switch
	PBLK	Pre-Blanking (Pulse)
	PC1-3	Corrector of PNP Transistor
	PCBM	Carrier Balance
	PCH	Phase Compensator (Hall AMP)
	PCI	Phase Compensator (Current)
	PCO	Phase Compensator Out
	PCS	Switching Power Control
	PCV	Phase Compensator (Voltage)
	PE	Emitter of PNP Transistor
	PED	Pedestal
	PEDECNT	Pedestal Control
	PENO	Alarm (L)
	PFP	Pilot Frame Position
	PGA, B	Power Ground A, B
	PGC	Pulse Generator Comparator
	PGI	Pulse Generator Input
	PGMM	Pulse Generator Monostable Multivibrator
	PGO	Output of Pulse Generator AMP
	PMODE	Select Signal for Normal / Wide Screen
	PON	Power On
	POR	Power On Reset
	POSCOM	Common Position
	PREAMP	Pre-AMP
	PREBLK	Pre-Blanking
	PT	Protect for V Voltage
	PWM	Pulse Width Modulation
	PWMB	Pulse Width Modulation Pulse
Q	Q2H	Source Output Select
R	R CTL P	Recorded Control Pulse (+)
	R CTL R	Recorded Control Pulse (–)
	R/B	Read/Busy
	R/L	Direction Control for Data Transmition
	RA	Recording AMP
	RA1	Rec AMP 1
	RAC AC	Rec Audio Current
	RAD	Read Address Data
	RAE	Read Address Enable
	RB	Read Busy
	R-B	R Bias
	RCB	R Carrier Balance
	RE	Read Enable
	RE(F), (S)	Rotary Erase Head Transformer
	REB	R Bias
	REC CC	Rec Current Control
	REC CCNT	Rec Current Control
	RECCTRL	Recording Control Pulse
	RECI	Rec Amp Switch

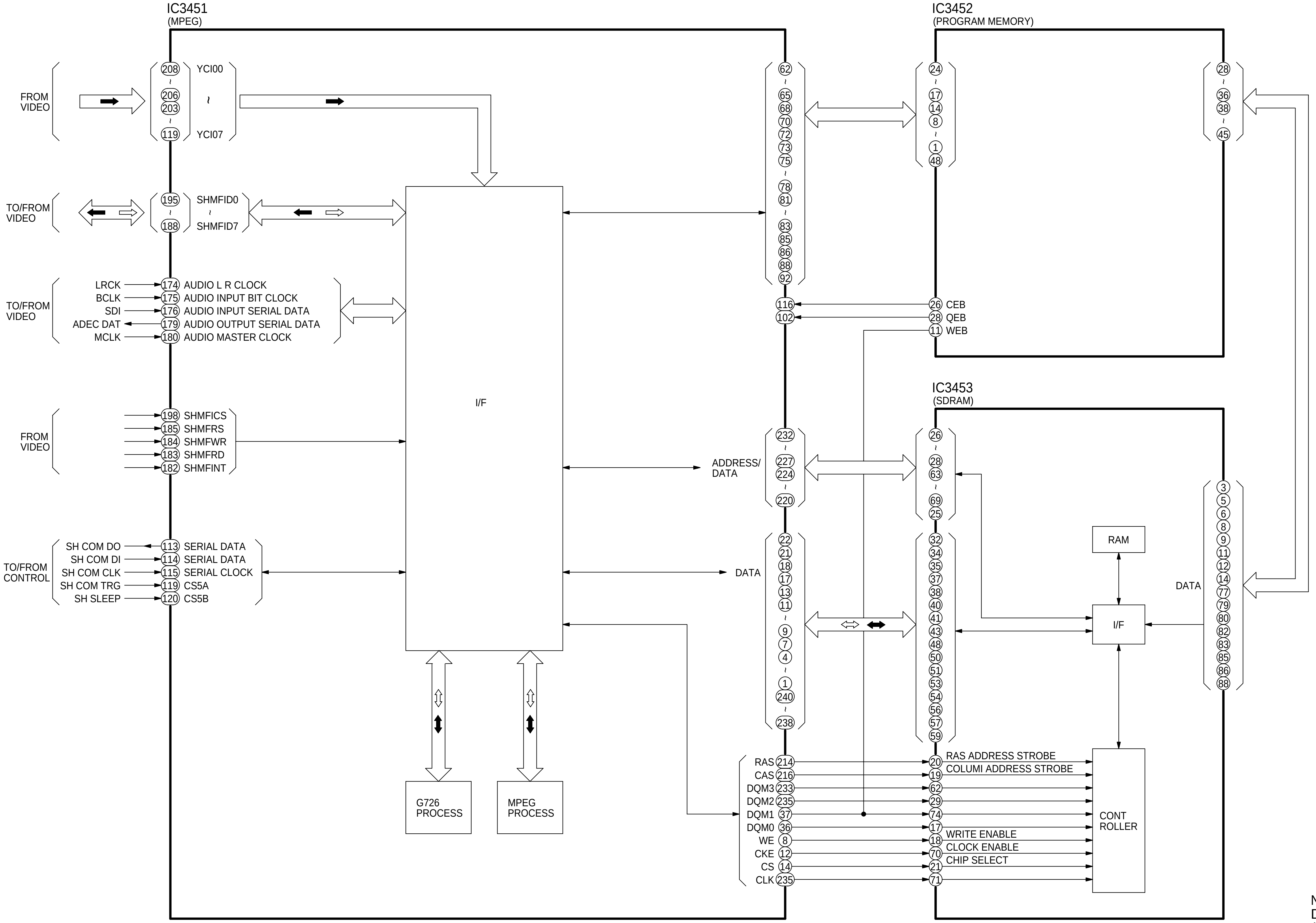
INITIAL/LOGO		ABBREVIATIONS
	EQ	Equalizer
	EVF	Electric View Finder
	EXT DC	External DC (AC Adaptor)
	EXT DC(H)	AC Adaptor DC (H)
	EXT NOREG	AC Adaptor 6V
	EXT S DATA	Serial Data for Edit
	EXT SCK	Serial Clock for Edit
	EZOOM	Electric Zoom
F		
	F ENC	Lens F-Value
	FACT MODE	Factry Mode (not used in the service)
	FB	Feed Back
	FC	Saw Tooth Signal In
	FCK	Clock
	FCO	Saw Tooth Signal Generator
	FENC	Focus Encoder
	FEND	Frame End Pulse
	FH2B	FH/2 (15.625KHz / 2=7.8125KHz)
	FIX OSD	Auto Tracking Off (H)
	FLICK	Flicker Output
	FM	Field Memory
	FM0-7	Field Memory 0-7
	FMCO0-3	Field Memory Chrominance Out 0-4
	FMDIR	Focus Motor Direction
	FMOEM	Field Memory Enable
	FMOEO	Field Memory Enable
	FMT1-4	Focus Motor Terminal 1-4
	FMY00-07	Field Memory Luminance Out 0-7
	FMYI0-07	Field Memory Luminance In 0-7
	FNO	F Value
	FPS	Frame Refference Signal
	FR	Capstan Reverse High
	FRP	Frame Refference Pulse
	FRPSO	Frame Start Pulse
G	G1, G2, G3	Gap 1, 2 and 3
	GCA	Gain Control AMP
	GCNT	Gain Control
	G-CNT	AGC Adjustment
	GCTRL	Gain Control
	GENE	Generator
	GF	FG AMP Terminal
	GSW	Ground for Switching Power
H	H/M/N	Hi-Fi / Mix / Normal
	H/N	Hi-Fi / Normal
	H1, 2	H. CCD Drive Pulse
	HAP	Horizontal Aperture
	HASW	Head AMP Switching Pulse
	HB	Hall Bias
	HBR SET	High Brightness Set
	HBRST	High Brightness Set
	HCLR	High Clear
	HCP	Shift Clock for Horizontal Drive
	HD	Horizontal Drive Pulse
	HDTV	High Definition TV
	HEX	Hexadecimal
	HG	Hall Gain
	HID	Head Switching Pulse
	HLT	High Bright Signal
	HALL IN(+), (–)	Input Signal from Hall IC
	HP	Headphone
	HPF	High Pass Filter
	HSE	Modulated Data Output
	HSP	Timing Pulse for Shaffling Memory
	HSS	Horizontal Sync Signal
	HSW	Head Switching Pulse
	HS-WT	High Speed Zoom
	HSZ	High Speed Zoom
I	I/F	Interface
	I-2 C	Inter Integrated Circuit
	ID(H)	Wide Television (H)
	IMP	Inter Microprocessor Protocol
	INF	CCD Input Signal 1
	INF	Input Frame Signal
	INS	CCD Input SIgnal 2
	INTER	Interval Recording
	INV	Inverter
	IOU	R-Y Analogue Signal Output
	IOV	B-Y Analogue Signal Output
	IOY	Y Analogue Signal Output
	IR	Infrared Rays
	IRDET	Imfrared Ray Detection
	IREF	Current Adjustment Terminal
	IRIS/SH	Iris / Shutter Control
	IRQ	Interrupt Request
	ITI	Insert & Track Information
J	JPEG	Joint Photographic Image Cording Experts Group
K	KANDO	Digital Gain Up
	KB	Carrier Balance
	KEY IN	Key Scan
	KND	Digital Gain Up
	KNEE	Luminance Compensate
L	LCD	Liquid Crystal Display
	LCD P(L)	LCD Power On (L)
	LD	Load Pulse
	LDD	Liquid Direct Drive
	LEDCNT	LED Control
	LI-BATT	Lithium Battery
	LOAD	Loading
	LOAD F, R	Loading Direction (F: Forward / R: Reverse)
	LPF	Low Pass Filter
	LRMONO	Monoral Audio (L + R)
	LSB	Least Significant Bit

INITIAL/LOGO		ABBREVIATIONS
	CRA	Pre Apature Gain Control
	CRST	Camera Reset
	CS	Chip Select
	CS 0-7	Chrominance Signal Out 0-7
	CSEL	Clock Phase Select
	CSI 0-7	Chrominance Signal In 0-7
	CTSW	Crosstalk Switch
	CURR	Current
	CW	Clockwise
	CYL EC	Cylinder Motor Trque Control
	CYL PG	Cylinder Motor PG
	CYL VM	Cylinder Motor Current or Power
D	D CLK	Digital Clock
	D MODE	Digital Mode Switch Signal
	D01-03	Zoom 01-03
	DA UV SEL	D/A Convertor U/V Select
	DAC	Digital Analogue Converter
	DAG	Digital Analogue Ground
	DB0-7	Data 0-7
	DB0-7	Microprocessor Data
	DCC	DC Clamp Control
	DCCNT	DC Control
	DCI	Digital Channel Cording IC
	DCLR	Digital Clear
	DCP	Digital Clamp Pulse
	DCS-CLK, DA	CAS & DV I/F Serial Clock
	DC-STP1	DCS Serial Start
	DC-STP2	DCS Serial Stop
	DCT	Discrete Cosine Transform (Compression)
	DCX7	Serial Data
	DEDP 0-3	Playback Data
	DEDR 0-3	Rec Data
	DEMO	Demodulation
	DEMP	A/D Convertor Empahsis Control
	DEMP	De-Emphasis
	DFD 0-7	Encode Data In/Out Between Shaffling Memory
	DFD0-7	Encode Input/Output Signal for Shuffling Memory
	DIBDCK	Bit Clock
	DICLK	Digital Clock
	DIDAT	Serial Data
	DIDAT	Serial Data Durring Digital Audio In
	DIF	Digital Interface
	DILRCK	L/R Clock
	DILRCK	Serial Clock Durring Digital Audio In
	DIMCK	Master Clock
	DIMCK	Mater Clock Durring Digital Audio In
	DIO 1-8	Data In/Out
	DIOS	Data In/Out Select Control Signal
	DIOS	Select Signal for Digital In/Out
	DIS	Digital Image Stabilizer
	DIS R/B	Digital Image Stabilizer Read (H)/Busy (L)
	DIS R/B	DIS IC Rady/Busy
	DIS/KAND	Digital Image Stabilizer/Sensitivity
	DISCS	Dis Chip Select
	DISP	Display
	DL	Delay Line
	DOBCK	Audio A/D Convertor Bit Clock
	DOCTL	Data Output Control Signal
	DODAT	Serial Data (to D/A Converter)
	DOLRCK	Audio A/D Converter LR Clock
	DOLRCK	L/R Clock (to D/A Converter)
	DOMCK	Audio A/D Converter Master Clock
	DOMCK	Master Clock (to D/A Converter)
	DQ 1-16	Memory Data
	DRAM CAS	D-RAM Colum Address Strobe
	DRAM OE	D-RAM Out Enable
	DRAM RAS	D-RAM Read Address Strobe
	DREC	AV Delayed REC Start Pulse
	DRK	Dark (LPF Switch for Auto Focus)
	DS1, 2	Double Sampling Pulse
	DSF 0-7	Data In/Out for Shaffling Memory
	DSF 0-7	Input/Output Data to Shuffling Memory (18MHz)
	DSP	Digital Signal Processor
	DSP R/B	DSP IC Rady/Busy
	DSP-48K-H	DSP IC Clock Select
	DSTB	Data Stobe Signal
	DSV	Digital Sum Variation
	DV	Digital Video
	DVB	Digital Video Broadcast
	DVC	Digital Video Cassette
	DVDD	Digital VDD
	DVIO	Digital Video Input Output
	DVSS	Digital Ground
	DX	Shift Data for X Direction (for LCD)
	DY	Shift Data for Y Direction (for LCD)
	DY	TFT Y-axis Shift Data
	DZ	Digital Zoom
E	E Snap	Electric Snap Shot
	E ZM	Electric Zoom
	E2 CS or E2P CS	EEPROM Chip Select
	E2 R/B	EEPROM Rady/Busy
	E2P	EEPROM
	EARP	Earphone
	EC	Torque Control
	ECC	Error Correction Cording
	ECM	Electric Condencer Mic
	ECR	Reference Voltage for Capstan Torque
	EDA	Error Correction, DCI, ATF Servo
	EE CS	EEPROM Chip Select
	EE R/B	EEPROM Read (H)/Busy (L)
	EEPROM	Electric Erasable Programable Read Only Memory
	EIS	Electric Image Stabilizer (DIS)
	EMP	A/D Convertor Emphasis Control
	ENAB	Enable
	ENV	Enverope
	EOB	End of Block

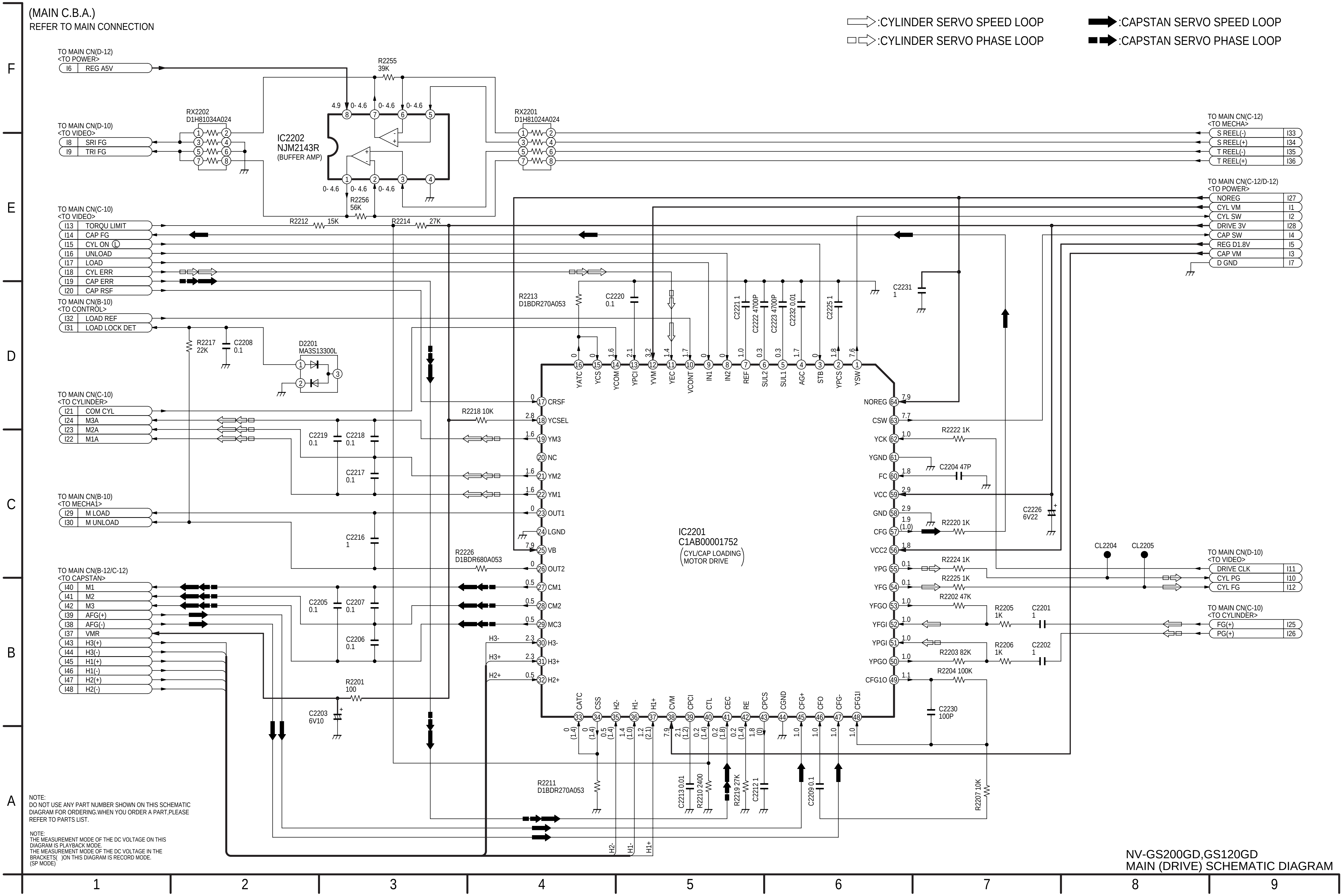
INITIAL/LOGO		ABBREVIATIONS
	BLKZ	Blanking Pulse for Zoom Encorder
	BM	Balance Modulator
	BQUIET	Bus Out Control Signal
	BUF IN/OUT	Buffer In/Out
	B-Y KB	B-Y Carrier Balance
	B-YO	B-Y Signal Out
C	C A In/Out	Pre-Aperture In/Out
	CAPSTP	Capstan Stop Flag
	C CNT	Colour Control
	C SYNC	Composite Sync Signal
	C/N	Carrier/Noise
	C0-7, C00-07	Chrominance Signal 0-7
	CAGAIN	Aperture Gain Control
	CAM	Camera
	CAM CLK	Camera Clock
	CAM RST	Camera Reset
	CAM SIOC	Camera Serial In/Out Contol
	CAM T	Camera Test
	CAM TL	Capstan Trque Limit
	CAP EC	Capstan Trque Control
	CAP P(H)	Capstan Power On (H)
	CAP R/F/S	Capstan Reverse (H)/Stop (M)/Forward (L)
	CAP SW	Capstan Power Control Switch
	CAPSTP H	Capstan Stop Flag (Stop High)
	CAPVM	Capstan Motor Current
	CAPVS	Capstan Motor Power Control Switch
	CAS	Compresion, Audio Process, Shuffling/Deshuffling
	CAS	Memory Address Strobe (Active Low)
	CASDOWN, DWN	Cassette Down (L)
	CB, CR	Chroma B, Chroma R
	CBLK	Composite Blanking Pulse
	CC	Channel Cording
	CCA	Curent Drive Control
	CCA	Current Control Amp
	CCD	Charge Coupled Devise
	CCW	Counterclockwise
	CD SP0-7	Digital Chroma
	CDS	Correlate Double Sampling Signal
	CDS1, 2	Sampling Pulse for CCD Output Signal
	CE	Chip Enable
	CE	Control Pulse Erase
	CEC	Capstan Error Code
	C-ERA(H)	Control Erase (H)
	CFEM	Chrominance Memory Signal
	CFM	Chrominance Field Memory
	CFM1-4	Chroma Field Memory Signal
	CG CLK	Character Generator Clock
	CG CLK DATA	Clock Generator Data
	CG DATA	Character Generator Data
	CGC	Chrominance Gain Control
	CGCS	Character Generator Chip Select
	CGO	Character Generator Serial Data
	CH	Charge
	CH1	Channel 1 (Odd Field)
	CHR	Character
	CHR BACK	Character Back-up
	CHR MIX	Character Mix
	CI, CO	Buffer In/Out
	CI,CO	Buffer Input & Output
	CIF	Control Signal Forward Input
	CIF, CIR	Positive Control Pulse, Negative Control Pulse
	CIR	Control Signal Reverse Input
	CK	Clock
	CL/CLK	Clock
	CLASS	Classeffication Signal for Compress (DCT/VLC)
	CLASS 0.1	Class Control Signal Durring DCT/VLC
	CLK135	13.5MHz System Clock
	CLK18	18MHz System Clock
	CLK2	Clock 2 (824XFH: 12.875MHz)
	CLK246	24.576MHz Clock
	CLK27	27MHz System Clock
	CLK450	450KHz Clock
	CLKDCLK	Digital Clock
	CLK-PH	Clock Phase Control
	CLK-REF	Reference Clock
	CLP-RST-H	Clamp Reset High Signal
	CLX	TFT X-axis Transmission Clock
	CLX, CLX1-4	Shift Clock for X Direction (LCD Panel)
	CLY	Shift Clock for Y Direction (LCD Panel)
	CLY	TFT Y-axis Transmission Clock
	CLY FG	Cylinder FG Signal
	CMEMO0-3	Chroma Memory Output Signal 0-3
	CMIX	Character Mix
	CMO	Chrominance Memory Output
	COMPC	Position Detection Pulse
	COM RDY	Serial Enable Signal
	CMODE	Camera Mode
	CNCLK	Clock
	CNR	Chrominance Noise Reduction
	CNT, CONT	Control
	CO	Control Out
	CO0-7	Chrominance Output 0 to 7 (Digital)
	COM	Common
	COM RDY	Serial Transmission Enable
	COMB	Comb Filter
	COS EQ	Cosin Equalizer
	CP	Clamp Pulse
	CP ON(H)	Camera Power On(H)
	CP2, 20	Clamp Pulse
	CP2A, CP2O	Encoder Clamp Pulse
	CPN	Component Signal
	CPOB	Clamp Pulse for Optical Blanking
	CPS	Composite Signal
	CPV	Gate Scan Clock
	CR OUT	Pre Apature Out
	CR POW SW	Camera Remote Power On Switch
	CRA	Aperture Gain Control

INITIAL/LOGO		ABBREVIATIONS
A	A GND	Analogue GND
	A HASW	Audio Head Amp Switching Pulse
	A HSW	Audio Switching Pulse
	A MUTE	Audio Mute
	A ORP	Audio Overlap Pulse
	A. TR	Auto Tracking
	A0-8, 0-17	Memory Address
	A3V2	AD Converter Reference Voltage
	AB0-4	Address Bus
	AB0-4, AB12-15	Address Bus Line 0-4, 12-15
	ABSF	Focus Encoder Input
	ACI	Analogue Channel Cording IC
	AD	AD Converter
	AD	Auto Date, Analogue Digital Converter
	AD CLK	AD Clock
	AD REC	Audio Delayed REC
	AD0-6	Address
	AD0-6, ADR0-6	Address Data Line
	ADCLK	Analogue Digital Converter Clock
	ADCNT	Analogue Digital Control
	ADCS	Analogue Digital Chip Select
	A-DET	Audio Detect
	ADREC	Audio Delaied Rec
	ADUB	Audio Dubbing
	AE	Auto Expose
	AECNT	Auto Expose Control
	AEE(H)	Audio E-E (H)
	AEH	Audio Erase Head
	AEIRQ	Auto Expose Interrupt Request
	AF/MF	Auto Focus/Manual Focus
	AF DIS CS	AF DIS Chip Select
	A-FADE(L)	Audio Fade (L)
	AF-AMP	AF HALL Bias
	AFCS	Auto Focus Chip Select
	AFRP	Audio PLL Voltage Control
	AF-VN	Zoom Encoder V-Ref (–)
	AF-VP	Zoom Encoder VREF (+)
	AGC	Automatic Gain Control
	AGCCNT	Automatic Gain Control Control
	AGND	Analogue Ground/Audio Ground
	AGS	Anti Ground Shooting
	AH(P) / (R)	Audio Head (Play) / (Record)
	AHASW	Audio Head Amp Switch Pulse
	AHSW	Audio Head Switch Pulse
	AI, AO	Buffer Input, Output
	AIBCK	Bit Clock (to A/D Converter)
	AIDAT	Serial Data (to A/D Converter)
	AILRCK	L/R Clock (to A/D Converter)
	AIMCK	Master Clock (to A/D Converter)
	ALC CNT	Auto Level Control Control
	ALC MAIN	Auto Level Control Drive
	ALE	Address Latch Enable
	A-LOCK	Full Auto Switch
	A-MUT(H)	Audio Mute (H)
	ANLPTH	Analogue Loop Through High
	AORP	Audio Overlap Pulse
	APCNT	Aperture Control
	APS	Auto Power Save
	ART VH	Artifical Vertical Sync
	AT CNT	Automatic Tracking Gain Adjust
	ATF	Automatic Track Finding
	ATFCLK	41.85MHz Clock
	ATFG	Auto Track Gain
	ATL	Auto Lock Select
	ATN	Absolute Track Number
	ATR OFF(H)	Auto Tracking Off (H)
	ATV	Advanced TV
	AUDIO(N)	Audio (Normal)
	AUX	Auxiliary
	AVDD	Analogue VDD
	AVSS	Analogue Ground
	AWTB	Auto White Balance B-Y
	AWTR	Auto White Balance R-Y
B	BACK	Back-up
	BACK UP	Microcomputer Back-up
	BACK VDD	Back-up Power
	BATT	Battery
	BATT ALARM	Battery Alarm
	BATT REF	Reference Voltage for Battery
	BCB	B Carrier Balance
	BCBM(B-Y)	B-Y Carrier Balance
	BCBM(R-Y)	R-Y Carrier Balance
	BD0-7	REC/Play In/Out Buss
	BDCK	Standard Bus Data Clock (9MHz)
	BDEN	Standard Bus Data Enable
	BEND	Data Block End Request
	BF	Burst Flag Pulse
	BFA	Burst Flag Pulse for Encorder
	BFO/BFI	Burst Flug Input/Output
	BI, BO	Buffer Input, Output
	BL	Back Light
	BL ON	Back Light ON (L)
	BL4V	Back Light 4V
	BLC 0, 1	Back Light Y Control Out, In
	BLDI/O	Back Light Drive Input/Output
	BLK	Blanking Pulse
	BLKA	Blanking for Encorder
	BLKA	Blanking Pulse for Encorder
	BLKI/O	Blanking Pulse In/Out

➡ MAIN SIGNAL PATH IN REC MODE
⇨ MAIN SIGNAL PATH IN PLAYBACK MODE


IC3451
(MPEG)
IC3452
(PROGRAM MEMORY)
IC3453
(SDRAM)
FROM VIDEO
208 YCI00
206
203
119 YCI07
TO/FROM VIDEO
195 SHMFID0
188 SHMFID7
TO/FROM VIDEO
LRCK 174 AUDIO L R CLOCK
BCLK 175 AUDIO INPUT BIT CLOCK
SDI 176 AUDIO INPUT SERIAL DATA
ADEC DAT 179 AUDIO OUTPUT SERIAL DATA
MCLK 180 AUDIO MASTER CLOCK
FROM VIDEO
198 SHMFICS
185 SHMFRS
184 SHMFWR
183 SHMFRD
182 SHMFINT
TO/FROM CONTROL
SH COM DO 113 SERIAL DATA
SH COM DI 114 SERIAL DATA
SH COM CLK 115 SERIAL CLOCK
SH COM TRG 119 CS5A
SH SLEEP 120 CS5B
I/F
G726 PROCESS
MPEG PROCESS
62
65
68
70
72
73
75
78
81
83
85
86
88
92
116
102
24
17
14
8
1
48
28
36
38
45
26 CEB
28 QEB
11 WEB
ADDRESS/ DATA
232
227
224
220
26
28
63
69
25
DATA
22
21
18
17
13
11
9
7
4
1
240
238
32
34
35
37
38
40
41
43
48
50
51
53
54
56
57
59
RAM
I/F
DATA
3
5
6
8
9
11
12
14
77
79
80
82
83
85
86
88
RAS 214
CAS 216
DQM3 233
DQM2 235
DQM1 37
DQM0 36
WE 8
CKE 12
CS 14
CLK 235
20 RAS ADDRESS STROBE
19 COLUMI ADDRESS STROBE
62
29
74
17 WRITE ENABLE
18 CLOCK ENABLE
70 CHIP SELECT
21
71
CONT ROLLER

NV-GS200GD,GS120GD
DSC BLOCK DIAGRAM
(NV-GS200GD ONLY)


(MAIN C.B.A.)
REFER TO MAIN CONNECTION
:CYLINDER SERVO SPEED LOOP
:CYLINDER SERVO PHASE LOOP
:CAPSTAN SERVO SPEED LOOP
:CAPSTAN SERVO PHASE LOOP
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
TO MAIN CN(D-12)
<TO POWER>
I6 REG A5V
TO MAIN CN(D-10)
<TO VIDEO>
I8 SRI FG
I9 TRI FG
RX2202
D1H81034A024
IC2202
NJM2143R
(BUFFER AMP)
R2255
39K
R2256
56K
4.9
0- 4.6
RX2201
D1H81024A024
TO MAIN CN(C-12)
<TO MECHA>
S REEL(-) I33
S REEL(+) I34
T REEL(-) I35
T REEL(+) I36
TO MAIN CN(C-12/D-12)
<TO POWER>
NOREG I27
CYL VM I1
CYL SW I2
DRIVE 3V I28
CAP SW I4
REG D1.8V I5
CAP VM I3
D GND I7
TO MAIN CN(C-10)
<TO VIDEO>
I13 TORQU LIMIT
I14 CAP FG
I15 CYL ON Ⓛ
I16 UNLOAD
I17 LOAD
I18 CYL ERR
I19 CAP ERR
I20 CAP RSF
R2212 15K
R2214 27K
TO MAIN CN(B-10)
<TO CONTROL>
I32 LOAD REF
I31 LOAD LOCK DET
R2217
22K
C2208
0.1
D2201
MA3S13300L
R2213
D1BDR270A053
C2220
0.1
C2221 1
C2222 4700P
C2223 4700P
C2232 0.01
C2225 1
C2231
1
TO MAIN CN(C-10)
<TO CYLINDER>
I21 COM CYL
I24 M3A
I23 M2A
I22 M1A
C2219
0.1
C2218
0.1
C2217
0.1
R2218 10K
TO MAIN CN(B-10)
<TO MECHA1>
I29 M LOAD
I30 M UNLOAD
C2216
1
R2226
D1BDR680A053
TO MAIN CN(B-12/C-12)
<TO CAPSTAN>
I40 M1
I41 M2
I42 M3
I39 AFG(+)
I38 AFG(-)
I37 VMR
I43 H3(+)
I44 H3(-)
I45 H1(+)
I46 H1(-)
I47 H2(+)
I48 H2(-)
C2205
0.1
C2207
0.1
C2206
0.1
R2201
100
C2203
6V10
IC2201
C1AB00001752
(CYL/CAP LOADING
MOTOR DRIVE)
YATC YCS YCOM YPCI YVM YEC VCONT IN1 IN2 REF SUL2 SUL1 AGC STB YPCS YSW
17 CRSF
18 YCSEL
19 YM3
20 NC
21 YM2
22 YM1
23 OUT1
24 LGND
25 VB
26 OUT2
27 CM1
28 CM2
29 MC3
30 H3-
31 H3+
32 H2+
NOREG 64
CSW 63
YCK 62
YGND 61
FC 60
VCC 59
GND 58
CFG 57
VCC2 56
YPG 55
YFG 54
YFGO 53
YFGI 52
YPGI 51
YPGO 50
CFG1O 49
CATC CSS H2- H1- H1+ CVM CPCI CTL CEC RE CPCS CGND CFG+ CFO CFG- CFG1I
R2222 1K
C2204 47P
C2226
6V22
R2220 1K
CL2204
CL2205
R2224 1K
R2225 1K
R2202 47K
R2205
1K
C2201
1
R2206
1K
C2202
1
R2203 82K
R2204 100K
C2230
100P
TO MAIN CN(D-10)
<TO VIDEO>
DRIVE CLK I11
CYL PG I10
CYL FG I12
TO MAIN CN(C-10)
<TO CYLINDER>
FG(+) I25
PG(+) I26
R2211
D1BDR270A053
C2213 0.01
R2210 2400
R2219 27K
C2212 1
C2209 0.1
R2207 10K
H2-
H1-
H1+

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE.
(SP MODE)

NV-GS200GD,GS120GD
MAIN (DRIVE) SCHEMATIC DIAGRAM

Ref. No.	IC2001																			
MODE	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260
STOP	2.7	0	-	-	-	2.8	0	2.8	-	-	-	2.5	-	0	2.8	0	2.8	0	2.8	2.8
PLAY	2.7	0	-	-	-	2.8	0	2.8	-	-	-	2.5	-	0	2.8	0	2.8	0	2.8	2.8
REC	2.7	0	-	-	-	2.8	0	0	-	-	-	2.5	-	0	2.8	0	2.8	0	2.8	2.8
F.F.	2.7	0	-	-	-	2.8	0	2.8	-	-	-	2.5	-	0	2.8	0	2.8	0	2.8	2.8
REW	2.7	0	-	-	-	2.8	0	2.8	-	-	-	2.5	-	0	2.8	0	2.8	0	2.8	2.8

Ref. No.	IC2001																			
MODE	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280
STOP	2.8	-	1.4	2.8	-	2.8	2.8	1.8	2.1	2.8	2.1	1.4	0	-	0	2.8	2.8	2.8	0.1	-
PLAY	2.8	-	2.1	2.8	-	2.8	2.8	1.8	2.1	2.8	2.1	0.7	2.8	-	0	2.8	2.8	2.8	0.1	-
REC	2.8	-	2.1	2.8	-	2.8	2.8	1.8	2.1	2.8	2.1	2.1	0	-	0	2.8	2.8	2.8	0.1	-
F.F.	2.8	-	2.1	2.8	-	2.8	2.8	1.8	2.1	2.8	2.1	2.1	1.4	-	0	2.8	2.8	2.8	0.1	-
REW	2.8	-	2.1	2.8	-	2.8	2.8	1.8	2.1	2.8	2.1	1.4	1.4	-	0	2.8	2.8	2.8	0.1	-

Ref. No.	IC2001		IC2006									IC2008								
MODE	281		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	
STOP	2.8		2.8	2.8	2.7	2.7	0	0	-	2.9		2.7	2.7	2.7	0	2.7	2.8	2.9	2.9	
PLAY	2.8		0	2.8	2.7	2.7	0	0	-	2.9		2.7	2.7	2.7	0	2.7	2.8	2.9	2.9	
REC	2.8		2.8	2.8	2.7	2.7	0	0	-	2.9		2.7	2.7	2.7	0	2.7	2.8	2.9	2.9	
F.F.	2.8		0	2.8	2.7	2.7	0	0	-	2.9		2.7	2.7	2.7	0	2.7	2.8	2.9	2.9	
REW	2.8		0	2.8	2.7	2.7	0	0	-	2.9		2.7	2.7	2.7	0	2.7	2.8	2.9	2.9	

Ref. No.	IC2009																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	0	0	2.9	2.9	-	1.2	0	0	0	-	-	-	0.1	0.3	0.3	0.3	1.0	1.0
PLAY	0	0	0	0	2.9	2.9	-	1.2	0	0	0	-	-	-	0.1	0.3	0.3	0.3	1.0	1.0
REC	0	0	0	0	2.9	2.9	-	1.2	0	0	0	-	-	-	0.1	0.3	0.3	0.3	1.0	1.0
F.F.	0	0	0	0	2.9	2.9	-	1.2	0	0	0	-	-	-	0.1	0.3	0.3	0.3	1.0	1.0
REW	0	0	0	0	2.9	2.9	-	1.2	0	0	0	-	-	-	0.1	0.3	0.3	0.3	1.0	1.0

Ref. No.	IC2012						IC2014						IC2015					IC2017		
MODE	1	2	3	4	5		1	2	3	4	5		1	2	3	4		1	2	3
STOP	7.9	0	7.9	0	3.4		2.9	0	2.9	0	2.5		0	4.0	2.8	2.4		0	2.8	2.5
PLAY	7.9	0	7.9	0	3.4		2.9	0	2.9	0	2.5		0	4.0	2.8	2.4		0	2.8	2.5
REC	7.9	0	7.9	0	3.4		2.9	0	2.9	0	2.5		0	4.0	2.8	2.4		0	2.8	2.5
F.F.	7.9	0	7.9	0	3.4		2.9	0	2.9	0	2.5		0	4.0	2.8	2.4		0	2.8	2.5
REW	7.9	0	7.9	0	3.4		2.9	0	2.9	0	2.5		0	4.0	2.8	2.4		0	2.8	2.5

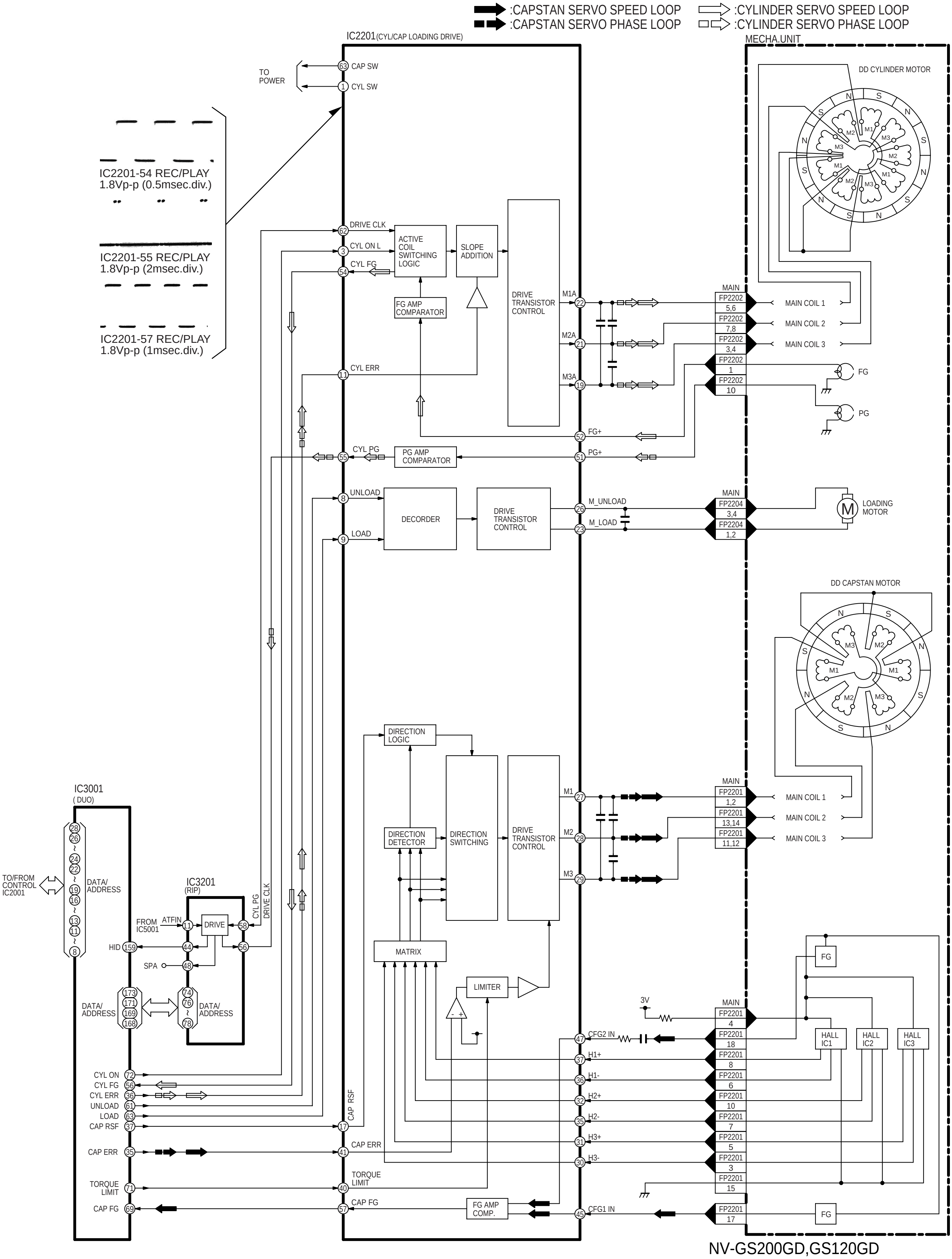
Ref. No.	IC2018									IC2019										
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8			
STOP	2.7	0	2.7	0	2.7	0	2.7	2.9		0	-	2.7	0	2.7	0	0	2.9			
PLAY	2.7	0	2.7	0	2.7	0	2.7	2.9		0	-	2.7	0	2.7	0	0	2.9			
REC	2.7	0	2.7	0	2.7	0	2.7	2.9		0	-	2.7	0	2.7	0	0	2.9			
F.F.	2.7	0	2.7	0	2.7	0	2.7	2.9		0	-	2.7	0	2.7	0	0	2.9			
REW	2.7	0	2.7	0	2.7	0	2.7	2.9		0	-	2.7	0	2.7	0	0	2.9			

TRs DC VOLTAGE CHART (SP MODE)

Ref. No.	Q2001				Q2002				Q2003				Q2004				Q2005			
MODE	E	C	B		S	D	G		E	C	B		S	D	G		E	C	B	
STOP	3.0	2.9	2.2		3.4	2.9	2.8		0	0	2.8		3.4	3.2	2.8		2.9	2.8	0	
PLAY	3.0	2.9	2.2		3.4	2.9	2.8		0	0	2.4		3.4	3.2	2.8		2.9	2.8	0	
REC	3.0	2.9	2.2		3.4	2.9	2.8		0	0	2.8		3.4	3.2	2.8		2.9	2.8	0	
F.F.	3.0	2.9	2.2		3.4	2.9	2.8		0	0	2.4		3.4	3.2	2.8		2.9	2.8	0	
REW	3.0	2.9	2.2		3.4	2.9	2.8		0	0	2.4		3.4	3.2	2.8		2.9	2.8	0	

Ref. No.	QR2001				QR2002				QR2003				QR2004				QR2005			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
STOP	0	2.9	0		2.9	2.8	0		0	1.7	0		0	0	1.7		2.9	2.8	0	
PLAY	0	2.9	0		2.9	2.8	0		0	1.7	0		0	0	1.7		2.9	2.8	0	
REC	0	2.9	0		2.9	2.8	0		0	1.7	0		0	0	1.7		2.9	2.8	0	
F.F.	0	2.9	0		2.9	2.8	0		0	1.7	0		0	0	1.7		2.9	2.8	0	
REW	0	2.9	0		2.9	2.8	0		0	1.7	0		0	0	1.7		2.9	2.8	0	

Ref. No.	QR2006							QR2007				QR2008			QR2009			QR2010		
MODE	1	2	3	4	5	6		E	C	B		E	C	B	E	C	B	E	C	B
STOP	2.9	2.8	0	2.9	2.8	0		3.2	3.2	0		0	0	2.8	2.8	2.8	0	0	0	2.8
PLAY	2.9	2.8	0	2.9	2.8	0		3.2	3.2	0		0	0	2.8	2.8	2.8	0	0	0	2.8
REC	2.9	2.8	2.8	2.9	0	0		3.2	3.2	0		0	0	2.8	2.8	2.8	0	0	0	2.8
F.F.	2.9	2.8	0	2.9	2.8	0		3.2	3.2	0		0	0	2.8	2.8	2.8	0	0	0	2.8
REW	2.9	2.8	0	2.9	2.8	0		3.2	3.2	0		0	0	2.8	2.8	2.8	0	0	0	2.8


:CAPSTAN SERVO SPEED LOOP
:CAPSTAN SERVO PHASE LOOP
:CYLINDER SERVO SPEED LOOP
:CYLINDER SERVO PHASE LOOP
IC2201(CYL/CAP LOADING DRIVE)
MECHA.UNIT
TO POWER
63 CAP SW
1 CYL SW
IC2201-54 REC/PLAY 1.8Vp-p (0.5msec.div.)
IC2201-55 REC/PLAY 1.8Vp-p (2msec.div.)
IC2201-57 REC/PLAY 1.8Vp-p (1msec.div.)
62 DRIVE CLK
3 CYL ON L
54 CYL FG
ACTIVE COIL SWITCHING LOGIC
SLOPE ADDITION
FG AMP COMPARATOR
DRIVE TRANSISTOR CONTROL
M1A 22
M2A 21
M3A 19
11 CYL ERR
52 FG+
55 CYL PG
PG AMP COMPARATOR
51 PG+
8 UNLOAD
9 LOAD
DECORDER
DRIVE TRANSISTOR CONTROL
26 M_UNLOAD
23 M_LOAD
DD CYLINDER MOTOR
N S M1 M2 M3
MAIN
FP2202 5,6 MAIN COIL 1
FP2202 7,8 MAIN COIL 2
FP2202 3,4 MAIN COIL 3
FP2202 1 FG
FP2202 10 PG
MAIN
FP2204 3,4
FP2204 1,2
LOADING MOTOR
M
DD CAPSTAN MOTOR
DIRECTION LOGIC
DIRECTION DETECTOR
DIRECTION SWITCHING
DRIVE TRANSISTOR CONTROL
M1 27
M2 28
M3 29
MAIN
FP2201 1,2 MAIN COIL 1
FP2201 13,14 MAIN COIL 2
FP2201 11,12 MAIN COIL 3
MATRIX
LIMITER
3V
MAIN
FP2201 4
47 CFG2 IN FP2201 18
37 H1+ FP2201 8
36 H1- FP2201 6
32 H2+ FP2201 10
35 H2- FP2201 7
31 H3+ FP2201 5
30 H3- FP2201 3
FP2201 15
45 CFG1 IN FP2201 17
FG
HALL IC1
HALL IC2
HALL IC3
FG AMP COMP.
17 CAP RSF
41 CAP ERR
40 TORQUE LIMIT
57 CAP FG
IC3001 (DUO)
TO/FROM CONTROL IC2001
28 26 ~ 24 22 ~ 19 16 ~ 13 11 ~ 8 DATA/ ADDRESS
HID 159
SPA 48
IC3201 (RIP)
FROM IC5001 ATFIN 11
DRIVE
58 44 56
CYL PG
DRIVE CLK
DATA/ ADDRESS 173 171 169 168
74 76 ~ 78 DATA/ ADDRESS
CYL ON 72
CYL FG 56
CYL ERR 36
UNLOAD 61
LOAD 63
CAP RSF 37
CAP ERR 35
TORQUE LIMIT 71
CAP FG 69

NV-GS200GD,GS120GD
CONTROL 2 BLOCK DIAGRAM

ICs DC VOLTAGE CHART (SP MODE)

Ref. No.	IC2001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	-	2.8	-	2.5	2.5	2.5	-	-	2.5	-	-	-	2.5	-	-	2.5	-	-	-	-
PLAY	-	2.8	-	2.5	2.5	2.5	-	-	2.5	-	-	-	2.5	-	-	2.5	-	-	-	-
REC	-	2.8	-	2.5	2.5	2.5	-	-	2.5	-	-	-	2.5	-	-	2.5	-	-	-	-
F.F.	-	2.8	-	2.5	2.5	2.5	-	-	2.5	-	-	-	2.5	-	-	2.5	-	-	-	-
REW	-	2.8	-	2.5	2.5	2.5	-	-	2.5	-	-	-	2.5	-	-	2.5	-	-	-	-

Ref. No.	IC2001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	-	-	2.8	2.5	2.5	-	2.5	2.5	2.5	1.8	-	1.9	1.8	-	1.9	1.9	0.6	1.9	1.4
PLAY	0	-	-	2.8	2.5	2.5	-	2.5	2.5	2.5	1.8	-	1.9	1.8	-	1.9	1.9	0.6	1.9	1.4
REC	0	-	-	2.8	2.5	2.5	-	2.5	2.5	2.5	1.8	-	1.9	1.8	-	1.9	1.9	0.6	1.9	1.4
F.F.	0	-	-	2.8	2.5	2.5	-	2.5	2.5	2.5	1.8	-	1.9	1.8	-	1.9	1.9	0.6	1.9	1.4
REW	0	-	-	2.8	2.5	2.5	-	2.5	2.5	2.5	1.8	-	1.9	1.8	-	1.9	1.9	0.6	1.9	1.4

Ref. No.	IC2001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	2.9	1.9	0	1.7	3.2	-	-	0	-	1.7	1.8	1.8	1.7	2.8	-	-	1.7	1.8	-	0
PLAY	2.9	1.9	0	1.7	3.2	-	-	0	-	1.7	1.8	1.8	1.7	2.8	-	-	1.7	1.8	-	0
REC	2.9	1.9	0	1.7	3.2	-	-	0	-	1.7	1.8	1.8	1.7	2.8	-	-	1.7	1.8	-	0
F.F.	2.9	1.9	0	1.7	3.2	-	-	0	-	1.7	1.8	1.8	1.7	2.8	-	-	1.7	1.8	-	0
REW	2.9	1.9	0	1.7	3.2	-	-	0	-	1.7	1.8	1.8	1.7	2.8	-	-	1.7	1.8	-	0

Ref. No.	IC2001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	1.8	0.6	-	-	-	0	0	2.8	2.8	-	-	0.6	-	2.5	0	-	-	0	0
PLAY	0	1.8	0.6	-	-	-	0	0	2.8	2.8	-	-	0.6	-	2.5	0	-	-	0	0
REC	0	1.8	0.6	-	-	-	0	0	2.8	2.8	-	-	0.6	-	2.5	0	-	-	0	0
F.F.	0	1.8	0.6	-	-	-	0	0	2.8	2.8	-	-	0.6	-	2.5	0	-	-	0	0
REW	0	1.8	0.6	-	-	-	0	0	2.8	2.8	-	-	0.6	-	2.5	0	-	-	0	0

Ref. No.	IC2001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	2.8	2.8	-	3.6	0	2.8	0	0	0	2.5	2.5	-	2.8	2.8	0	2.7	2.0	0	2.4	2.5
PLAY	2.8	2.8	-	0	0	2.8	0	0	0	2.5	2.5	-	2.8	2.8	0.5	2.7	2.0	0.5	2.4	2.5
REC	2.8	2.8	-	0	0	2.8	0	2.8	0	2.5	2.5	-	2.8	2.8	0.5	2.7	2.0	0.5	2.4	2.5
F.F.	2.8	2.8	-	0	0	2.8	0	0	0	2.5	2.5	-	2.8	2.8	0	2.7	2.0	0	2.4	2.5
REW	2.8	2.8	-	0	0	2.8	0	0	0	2.5	2.5	-	2.8	2.8	0	2.7	2.0	0	2.4	2.5

Ref. No.	IC2001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	2.8	0	2.5	1.9	2.7	2.7	2.5	2.8	2.0	-	-	2.8	2.8	0	2.8	2.4	-	0	0	0
PLAY	2.8	0.5	2.5	1.9	2.7	2.7	2.5	2.8	2.0	-	-	2.8	2.8	0	2.4	2.4	-	0	0	0
REC	2.8	0.5	2.5	1.9	2.7	2.7	2.5	2.8	2.0	-	-	2.8	2.8	2.0	2.8	2.4	-	0	0	0
F.F.	2.8	0	2.5	1.9	2.7	2.7	2.5	2.8	2.0	-	-	2.8	2.8	2.0	2.4	2.4	-	0	0	0
REW	2.8	0	2.5	1.9	2.7	2.7	2.5	2.8	2.0	-	-	2.8	2.8	2.0	2.4	2.4	-	0	0	0

Ref. No.	IC2001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
STOP	2.8	2.8	2.5	1.3	2.7	-	0	2.7	2.8	0.3	-	0.6	1.0	-	0.8	0.3	0.1	0.1	0.6	0.3
PLAY	2.8	2.8	2.5	1.3	2.7	-	0	2.7	2.8	0.3	-	0.6	1.0	-	0.8	0.3	0.1	0.1	0.6	0.3
REC	2.8	2.8	2.5	1.3	2.7	-	0	2.7	2.8	0.3	-	0.6	1.0	-	0.8	0.3	0.1	0.1	0.6	0.3
F.F.	2.8	2.8	2.5	1.3	2.7	-	0	2.7	2.8	0.3	-	0.6	1.0	-	0.8	0.3	0.1	0.1	0.6	0.3
REW	2.8	2.8	2.5	1.3	2.7	-	0	2.7	2.8	0.3	-	0.6	1.0	-	0.8	0.3	0.1	0.1	0.6	0.3

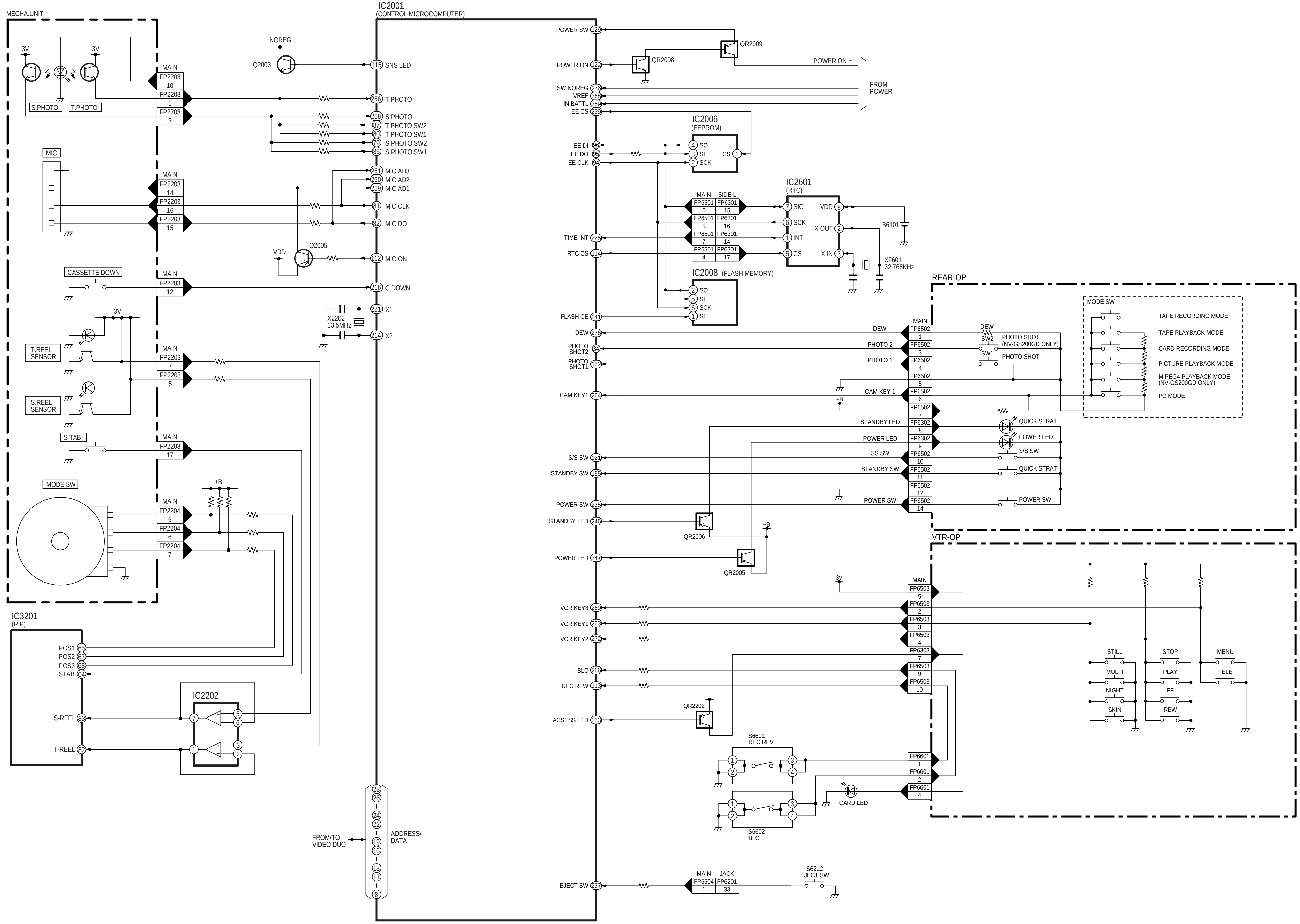
Ref. No.	IC2001																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
STOP	-	0.4	0.1	1.8	1.2	0	0.1	-	0.3	0.3	-	1.8	-	-	1.8	1.8	1.8	-	0.1	-
PLAY	-	0.4	0.1	1.8	1.2	0	0.1	-	0.3	0.3	-	1.8	-	-	1.8	1.8	1.8	-	0.1	-
REC	-	0.4	0.1	1.8	1.2	0	0.1	-	0.3	0.3	-	1.8	-	-	1.8	1.8	1.8	-	0.1	-
F.F.	-	0.4	0.1	1.8	1.2	0	0.1	-	0.3	0.3	-	1.8	-	-	1.8	1.8	1.8	-	0.1	-
REW	-	0.4	0.1	1.8	1.2	0	0.1	-	0.3	0.3	-	1.8	-	-	1.8	1.8	1.8	-	0.1	-

Ref. No.	IC2001																			
MODE	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
STOP	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	1.8	2.9	-	-
PLAY	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	1.8	2.9	-	-
REC	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	1.8	2.9	-	-
F.F.	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	1.8	2.9	-	-
REW	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	1.8	2.9	-	-

Ref. No.	IC2001																			
MODE	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
STOP	-	-	1.7	1.7	1.7	-	2.5	-	-	2.9	0	2.8	1.7	-	1.8	2.5	-	-	-	-
PLAY	-	-	1.7	1.7	1.7	-	2.5	-	-	2.9	0	2.8	1.7	-	1.8	2.5	-	-	-	-
REC	-	-	1.7	1.7	1.7	-	2.5	-	-	2.9	1.8	2.8	1.7	-	1.8	2.5	-	-	-	-
F.F.	-	-	1.7	1.7	1.7	-	2.5	-	-	2.9	0	2.8	1.7	-	1.8	2.5	-	-	-	-
REW	-	-	1.7	1.7	1.7	-	2.5	-	-	2.9	0	2.8	1.7	-	1.8	2.5	-	-	-	-

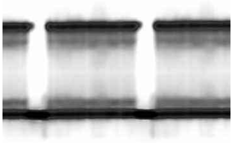
Ref. No.	IC2001																			
MODE	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220
STOP	-	-	-	-	0.4	0.6	2.8	-	0	2.8	2.5	1.1	-	1.1	-	0	2.8	2.9	-	2.7
PLAY	-	-	-	-	0.4	0.6	2.8	-	0	2.8	2.5	1.1	-	1.1	-	0	2.8	2.9	-	2.7
REC	-	-	-	-	0.4	0.6	2.8	-	0	2.8	2.5	1.1	-	1.1	-	0	2.8	2.9	-	2.7
F.F.	-	-	-	-	0.4	0.6	2.8	-	0	2.8	2.5	1.1	-	1.1	-	0	2.8	2.9	-	2.7
REW	-	-	-	-	0.4	0.6	2.8	-	0	2.8	2.5	1.1	-	1.1	-	0	2.8	2.9	-	2.7

Ref. No.	IC2001																			
MODE	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240
STOP	0	2.7	-	2.9	2.7	-	2.7	0	2.8	-	0	-	0	0	0	0	-	2.9	2.8	2.8
PLAY	0	2.7	-	2.9	2.7	-	2.7	0	2.8	-	0	-	0	0	0	0	-	2.9	0	2.8
REC	0	2.7	-	2.9	2.7	-	2.7	0	2.8	-	0	-	0	0	0	0	-	2.9	2.8	2.8
F.F.	0	2.7	-	2.9	2.7	-	2.7	0	2.8	-	0	-	0	0	0	0	-	2.9	0	2.8
REW	0	2.7	-	2.9	2.7	-	2.7	0	2.8	-	0	-	0	0	0	0	-	2.9	0	2.8

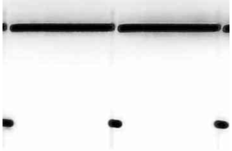

MECHA.UNIT
IC2001
(CONTROL MICROCOMPUTER)
3V
S.PHOTO
T.PHOTO
MAIN
FP2203
NOREG
Q2003
SNS LED
T PHOTO
S PHOTO
T PHOTO SW2
T PHOTO SW1
S PHOTO SW2
S PHOTO SW1
MIC
MIC AD3
MIC AD2
MIC AD1
MIC CLK
MIC DO
VDD
Q2005
MIC ON
CASSETTE DOWN
C DOWN
X1
X2
X2202
13.5MHz
T.REEL SENSOR
S.REEL SENSOR
S TAB
MODE SW
FP2204
+B
IC3201
(RIP)
POS1
POS2
POS3
STAB
S-REEL
T-REEL
IC2202
FROM/TO VIDEO DUO
ADDRESS/ DATA
POWER SW
POWER ON
QR2008
QR2009
POWER ON H
SW NOREG
VREF
IN BATTL
EE CS
FROM POWER
IC2006
(EEPROM)
EE DI
EE DO
EE CLK
SO
SI
SCK
CS
IC2601
(RTC)
SIDE L
FP6501
FP6301
SIO
INT
VDD
X OUT
X IN
B6101
X2601
32.768KHz
TIME INT
RTC CS
IC2008 (FLASH MEMORY)
SE
FLASH CE
REAR-OP
DEW
PHOTO SHOT2
PHOTO SHOT1
CAM KEY1
PHOTO 2
PHOTO 1
CAM KEY 1
FP6502
FP6302
SW2
SW1
PHOTO SHOT
(NV-GS200GD ONLY)
MODE SW
TAPE RECORDING MODE
TAPE PLAYBACK MODE
CARD RECORDING MODE
PICTURE PLAYBACK MODE
M PEG4 PLAYBACK MODE
(NV-GS200GD ONLY)
PC MODE
STANDBY LED
POWER LED
SS SW
STANDBY SW
QUICK STRAT
S/S SW
S/S SW
STANDBY SW
POWER SW
QR2006
QR2005
VTR-OP
FP6503
VCR KEY3
VCR KEY1
VCR KEY2
BLC
REC REW
ACSESS LED
QR2202
STILL
MULTI
NIGHT
SKIN
STOP
PLAY
FF
REW
MENU
TELE
S6601
REC REV
FP6601
CARD LED
S6602
BLC
EJECT SW
FP6504
FP6201
JACK
S6212
EJECT SW

NV-GS200GD,GS120GD
CONTROL 1 BLOCK DIAGRAM

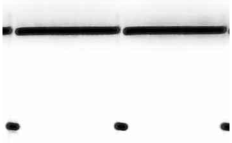
WF-201



WF-202



WF-203



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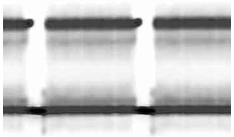
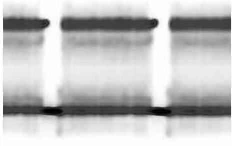
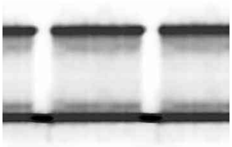


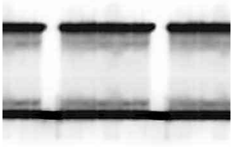
WF-205



WF-206



WF-207



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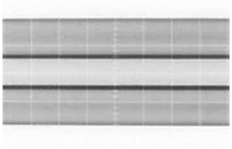

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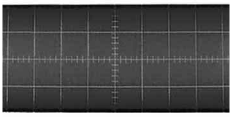

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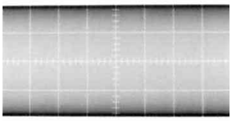
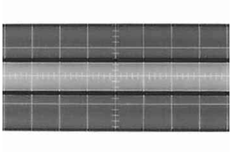
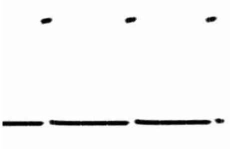


WF-211

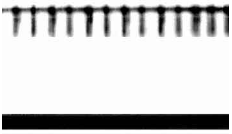


WF-212

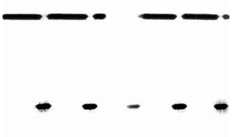
WF-213



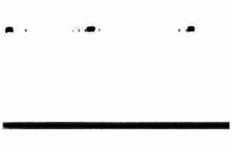
WF-214



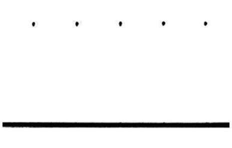
WF-215



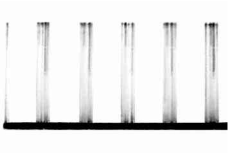
WF-216



WF-217

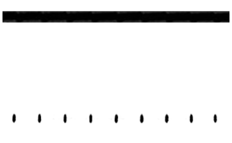


WF-218



WF-219

WF-220



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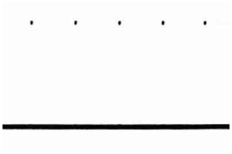

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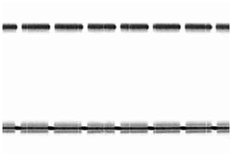
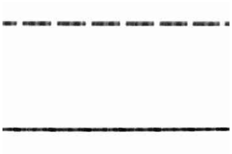


WF-223



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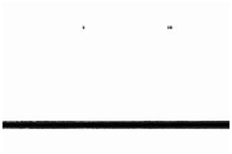

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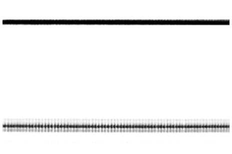

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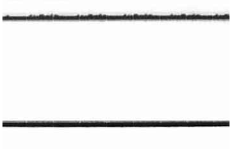

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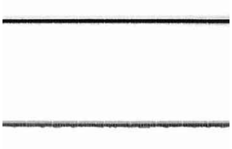

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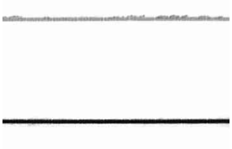

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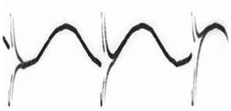

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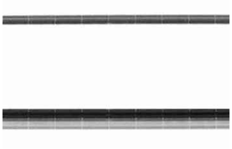

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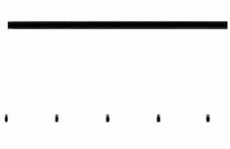
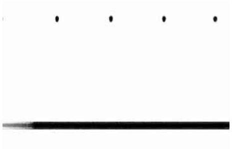


WF-232



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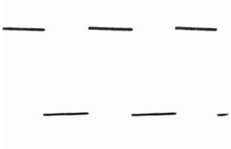

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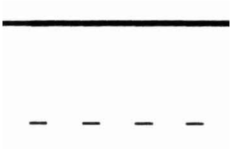

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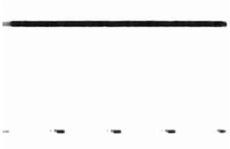
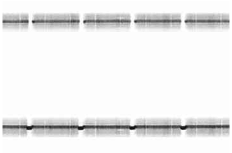


WF-236



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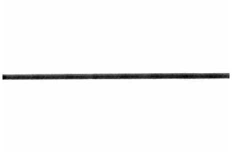

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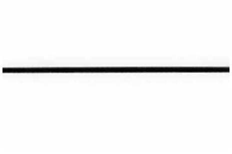

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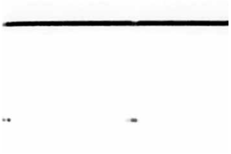
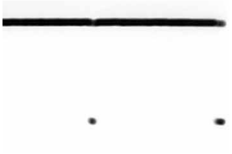


WF-164



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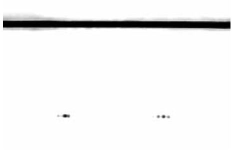

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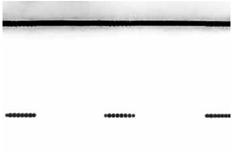
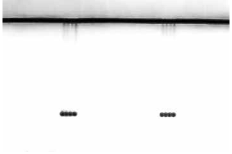


WF-167

WF-168



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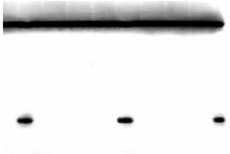
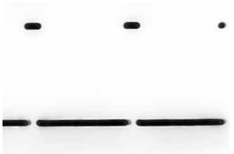
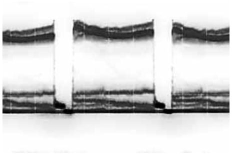


WF-170



WF-171



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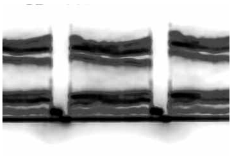

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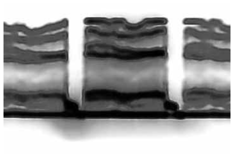

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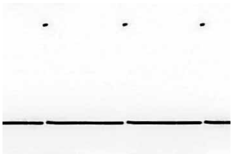
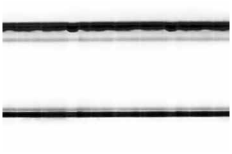


WF-175



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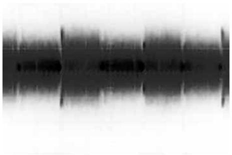
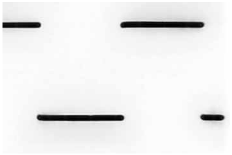
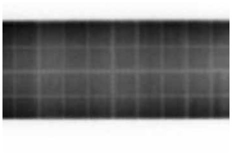


WF-177



WF-178



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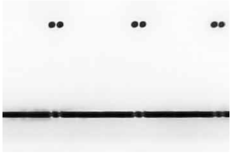
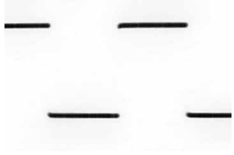
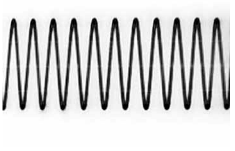


WF-180



WF-181



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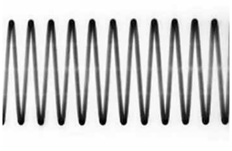
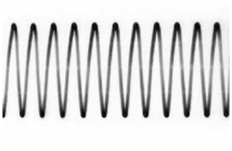
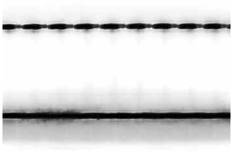


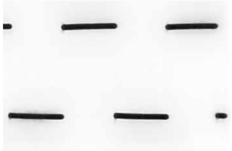
WF-183



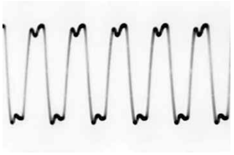
WF-184



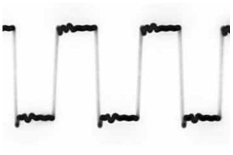
WF-185



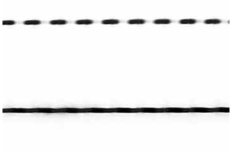
WF-186



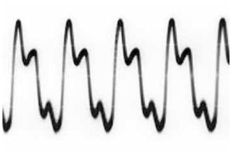
WF-187



WF-188



WF-189



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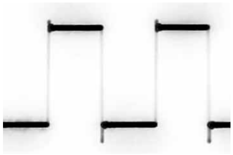
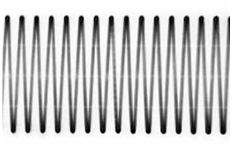
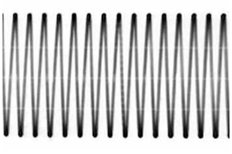


WF-191



WF-192



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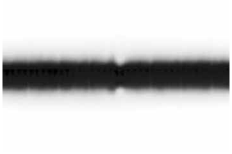

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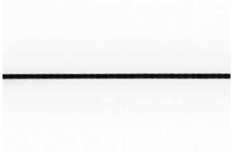

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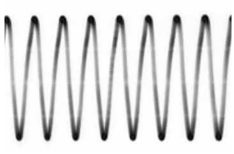

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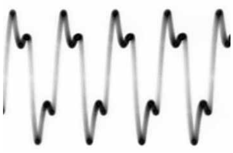

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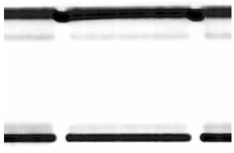

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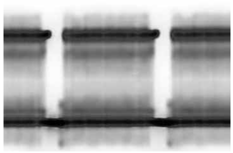

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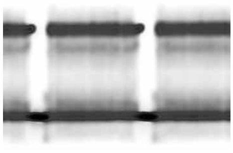

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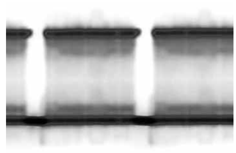

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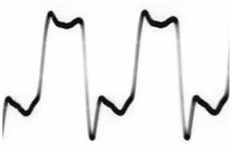

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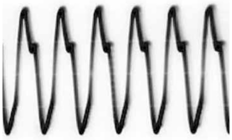

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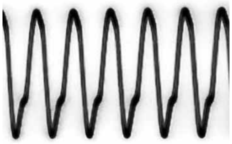

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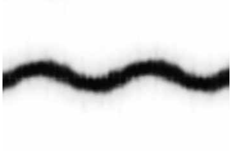

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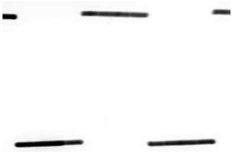

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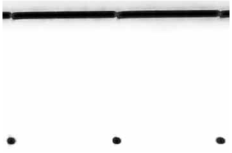

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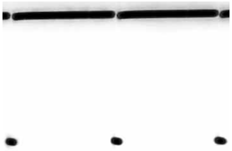

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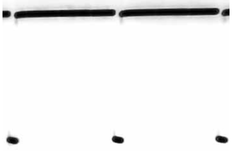

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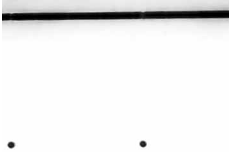

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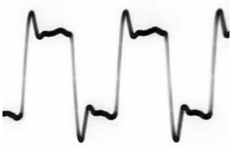

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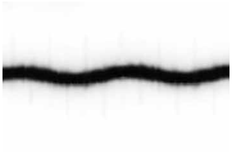

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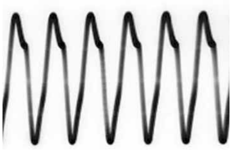

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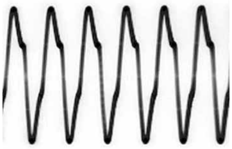

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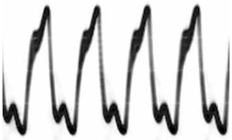

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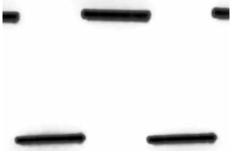

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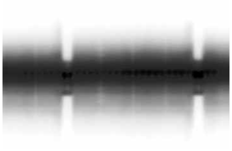

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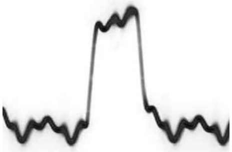

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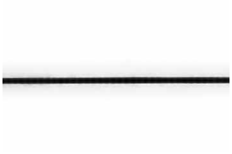

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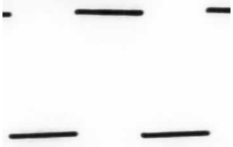

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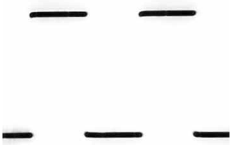

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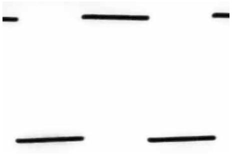

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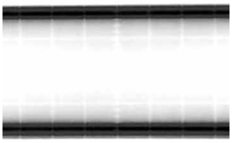

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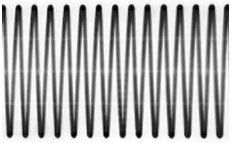

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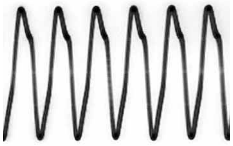

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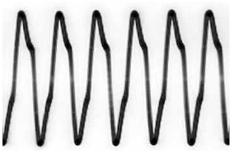

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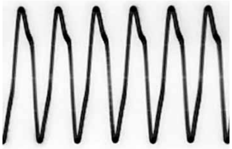

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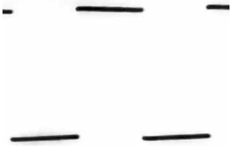

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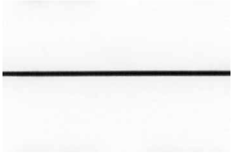

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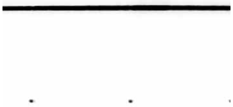

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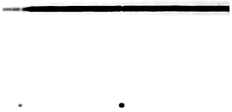

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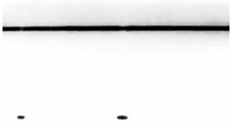

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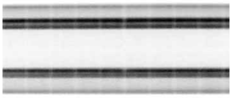

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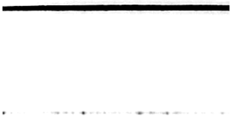

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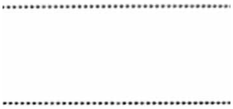

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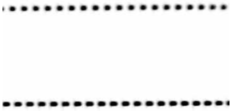

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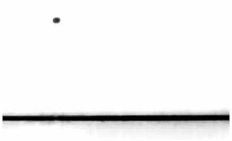

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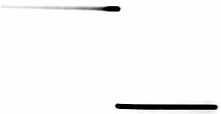

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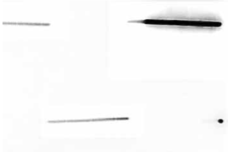

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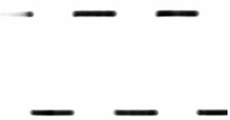

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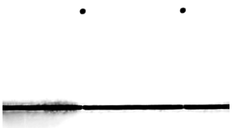
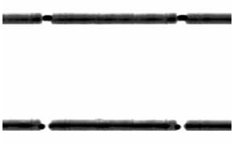


WF-81

WF-82

WF-83



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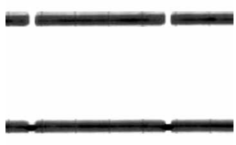
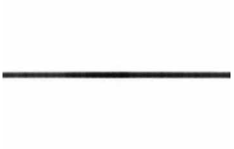
WF-85



WF-86



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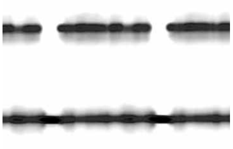

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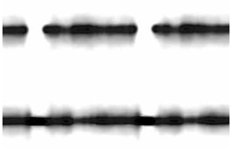

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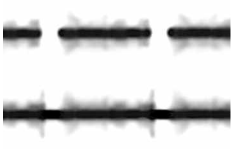

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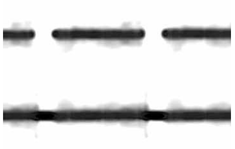
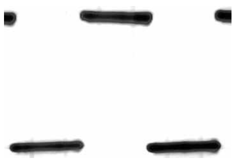


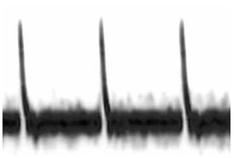
WF-91

WF-92



WF-93

WF-94



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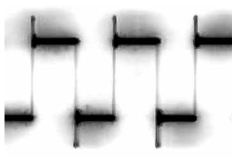

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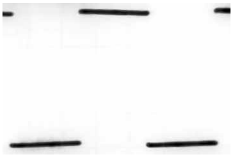

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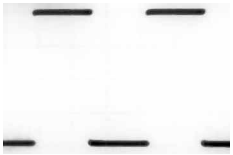

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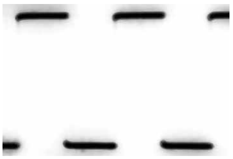

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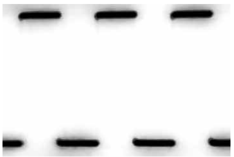

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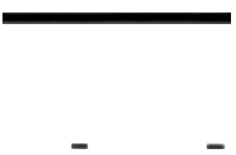

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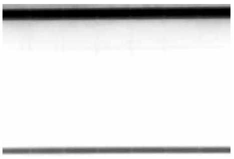

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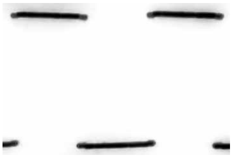

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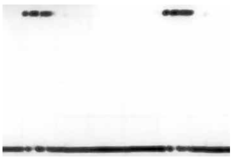

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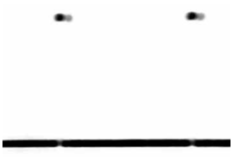
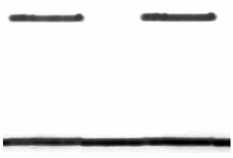


WF-105

WF-106



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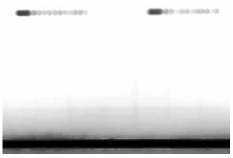

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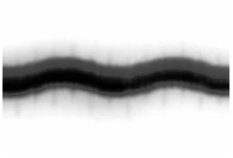

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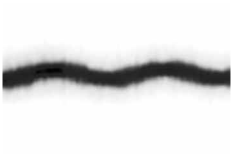
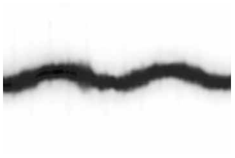
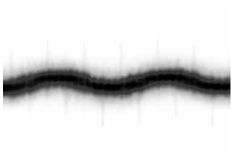


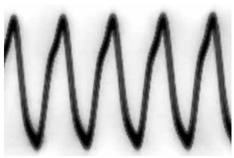
WF-110



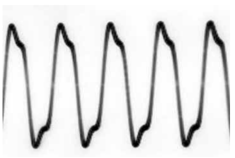
WF-111



WF-112



WF-113



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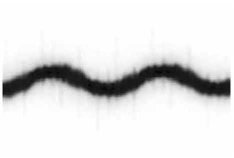
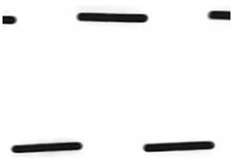


WF-115

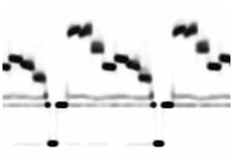
WF-116



WF-117

WF-118

WF-119



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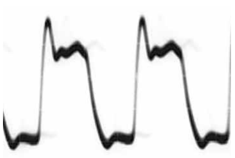

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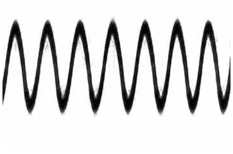
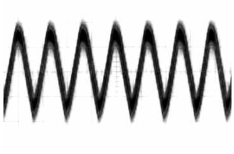
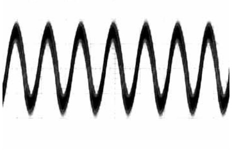


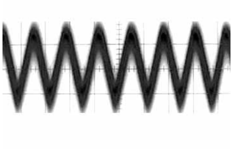
WF-42



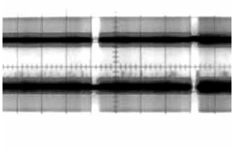
WF-43



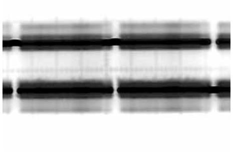
WF-44



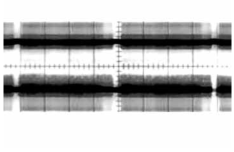
WF-45



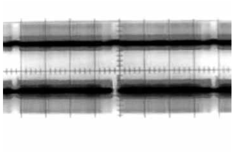
WF-46



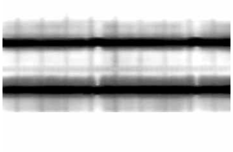
WF-47



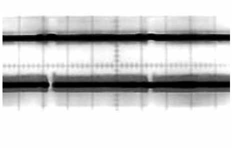
WF-48



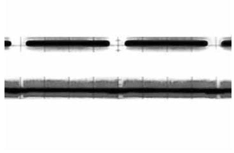
WF-49



WF-50



WF-51



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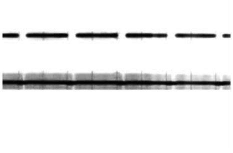
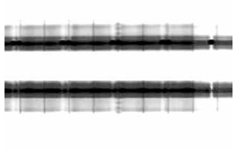
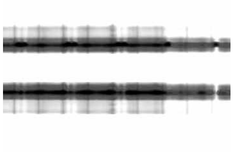


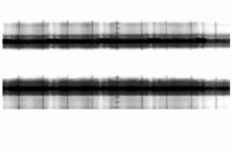
WF-53



WF-54



WF-55



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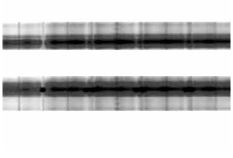

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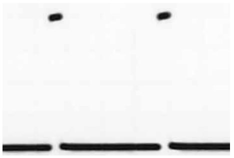
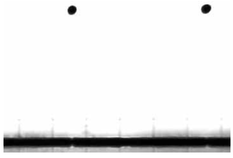


WF-58



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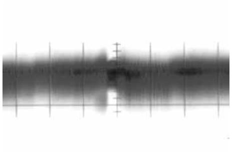
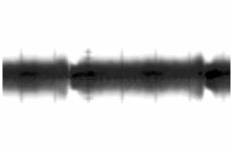
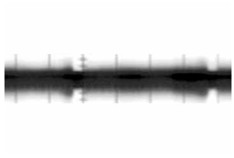


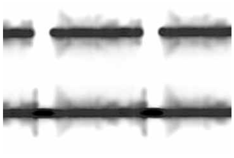
WF-60



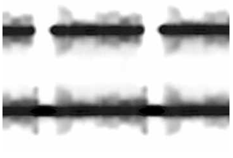
WF-61



WF-62



WF-63



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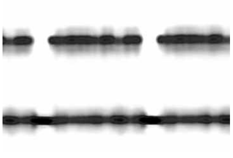

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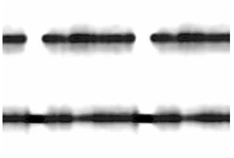

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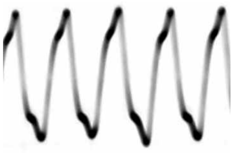

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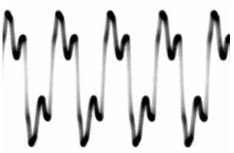

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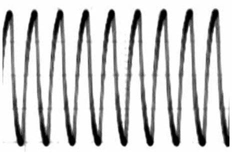
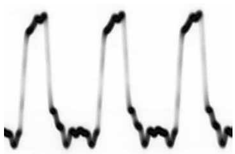


WF-69



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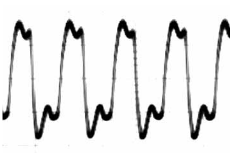

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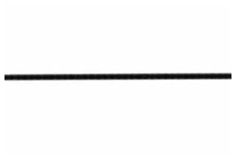

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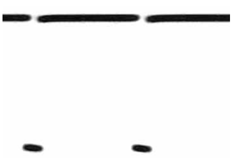

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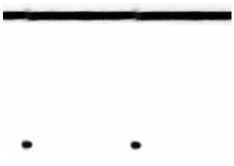

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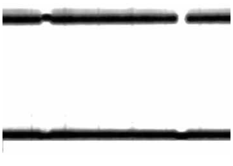
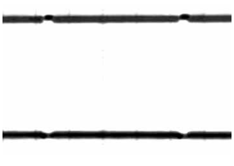


WF-75



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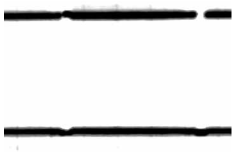

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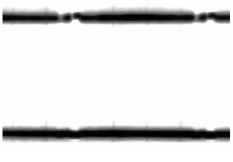
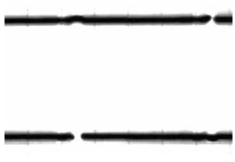
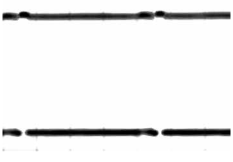


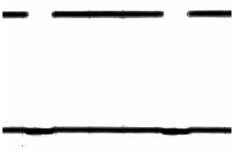
WF-78

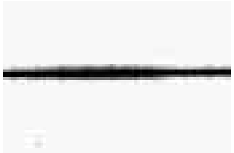
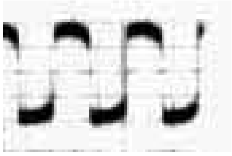
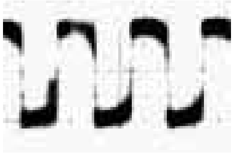
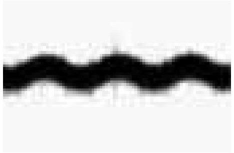
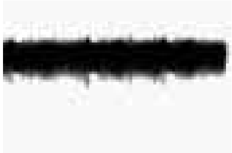
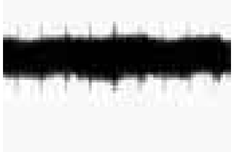
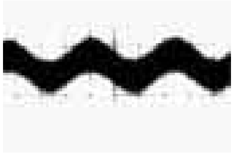
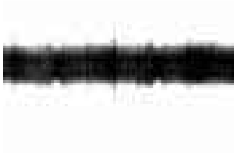
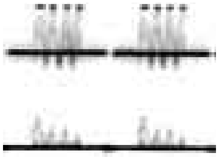
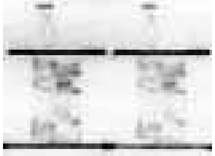
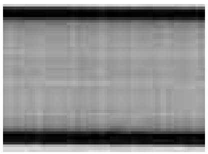
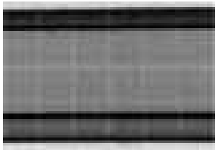
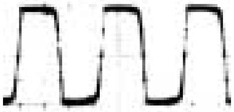
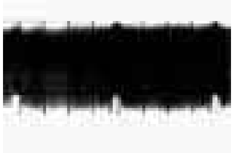
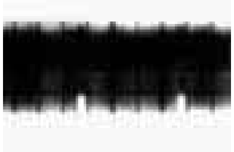
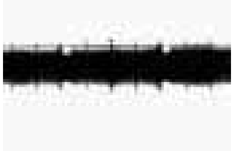
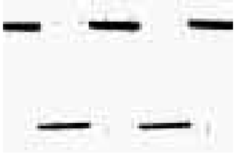
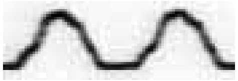
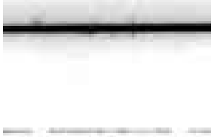
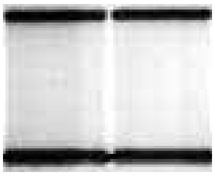
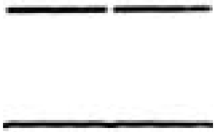
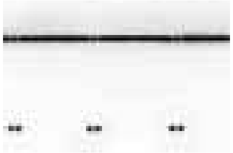
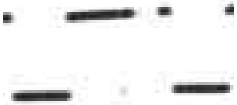
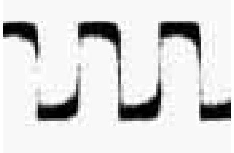
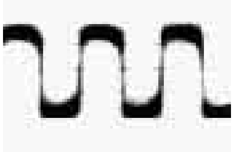
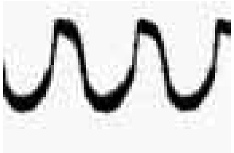
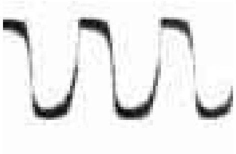
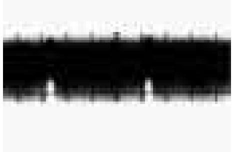
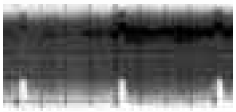
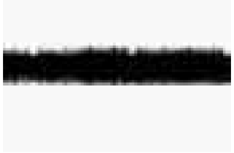
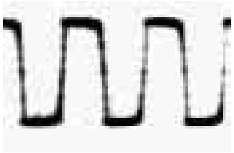
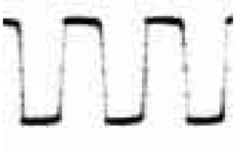
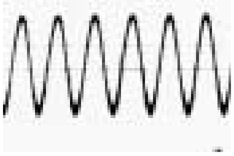
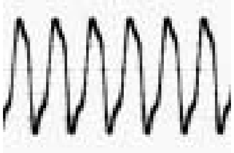
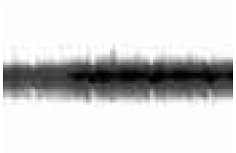
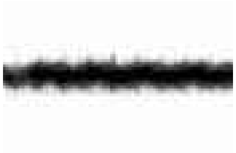
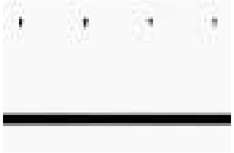
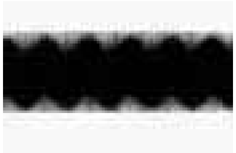
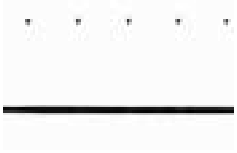
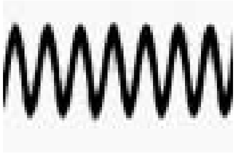


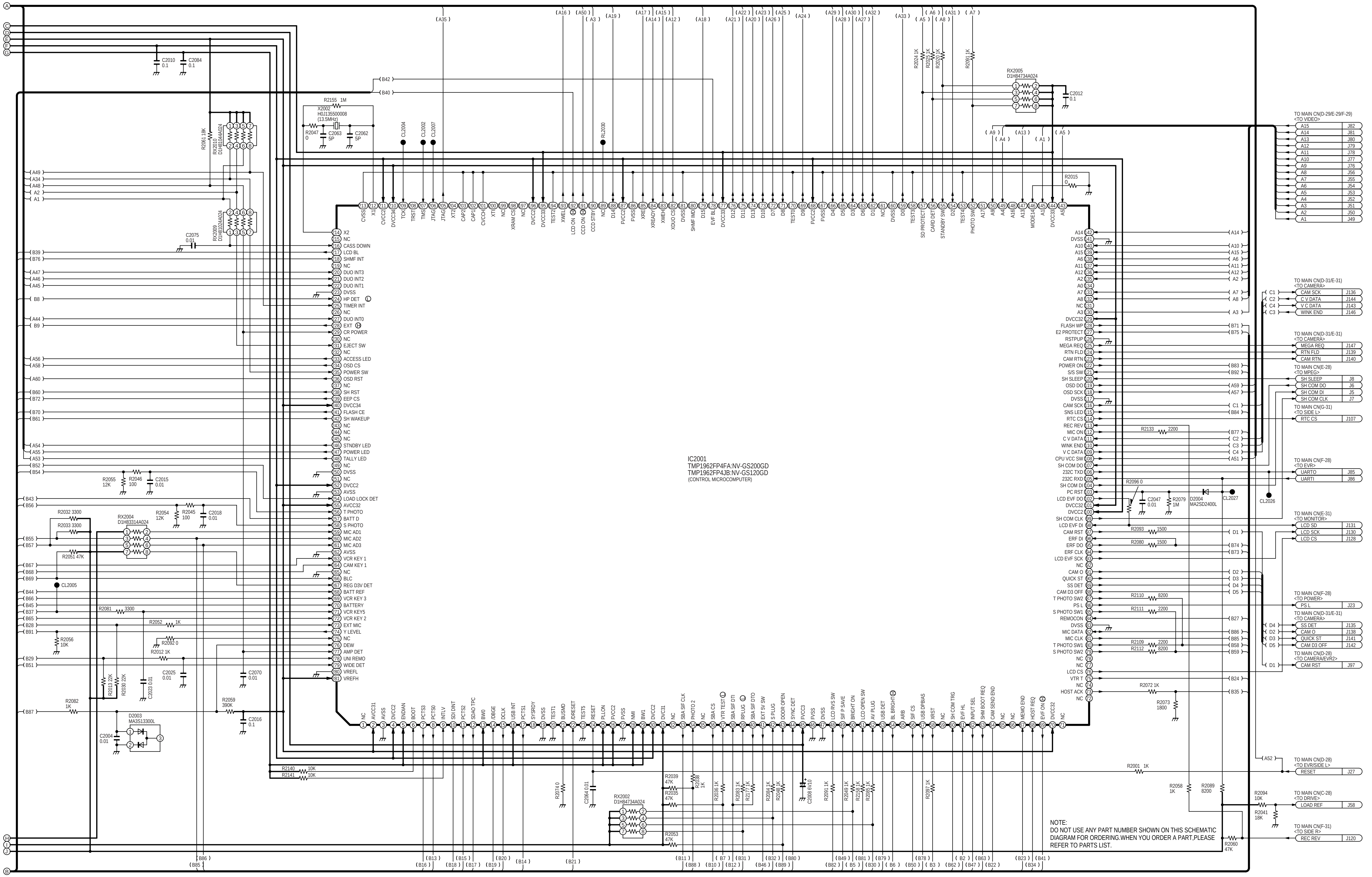
WF-79



WF-80



WF-1 	**WF-2** 	**WF-3** 	**WF-4** 	**WF-5** 
WF-6 	**WF-7** 	**WF-8** 	**WF-9** 	**WF-10** 
WF-11 	**WF-12** 	**WF-13** 	**WF-14** 	**WF-15** 
WF-16 	**WF-17** 	**WF-18** 	**WF-19** 	**WF-20** 
WF-21 	**WF-22** 	**WF-23** 	**WF-24** 	**WF-25** 
WF-26 	**WF-27** 	**WF-28** 	**WF-29** 	**WF-30** 
WF-31 	**WF-32** 	**WF-33** 	**WF-34** 	**WF-35** 
WF-36 	**WF-37** 	**WF-38** 	**WF-39** 	**WF-40** 


IC2001
TMP1962FP4FA:NV-GS200GD
TMP1962FP4JB:NV-GS120GD
(CONTROL MICROCOMPUTER)
X2002
H0J135500008
(13.5MHz)
R2155 1M
RX2005 D1H84734A024
RX2004 D1H83314A024
RX2002 D1H84734A024
RX2010 D1H81044A024
RX2009 D1H81044A024
D2003 MA3S133OOL
D2004 MA2SD2400L
CL2004
CL2002
CL2007
RL2030
CL2005
CL2026
CL2027
TO MAIN CN(D-29/E-29/F-29) <TO VIDEO>
TO MAIN CN(D-31/E-31) <TO CAMERA>
TO MAIN CN(E-28) <TO MPEG>
TO MAIN CN(G-31) <TO SIDE L>
TO MAIN CN(F-28) <TO EVR>
TO MAIN CN(E-31) <TO MONITOR>
TO MAIN CN(F-28) <TO POWER>
TO MAIN CN(D-28) <TO CAMERA/EVR2>
TO MAIN CN(D-28) <TO EVR/SIDE L>
TO MAIN CN(C-28) <TO DRIVE>
TO MAIN CN(F-31) <TO SIDE R>
CAM SCK J136
C V DATA J144
V C DATA J143
WINK END J146
MEGA REQ J147
RTN FLD J139
CAM RTN J140
SH SLEEP J8
SH COM DO J6
SH COM DI J5
SH COM CLK J7
RTC CS J107
UARTO J85
UARTI J86
LCD SD J131
LCD SCK J130
LCD CS J128
PS L J23
SS DET J135
CAM O J138
QUICK ST J141
CAM D3 OFF J142
CAM RST J97
RESET J27
LOAD REF J58
REC REV J120
14
15
16
17
18
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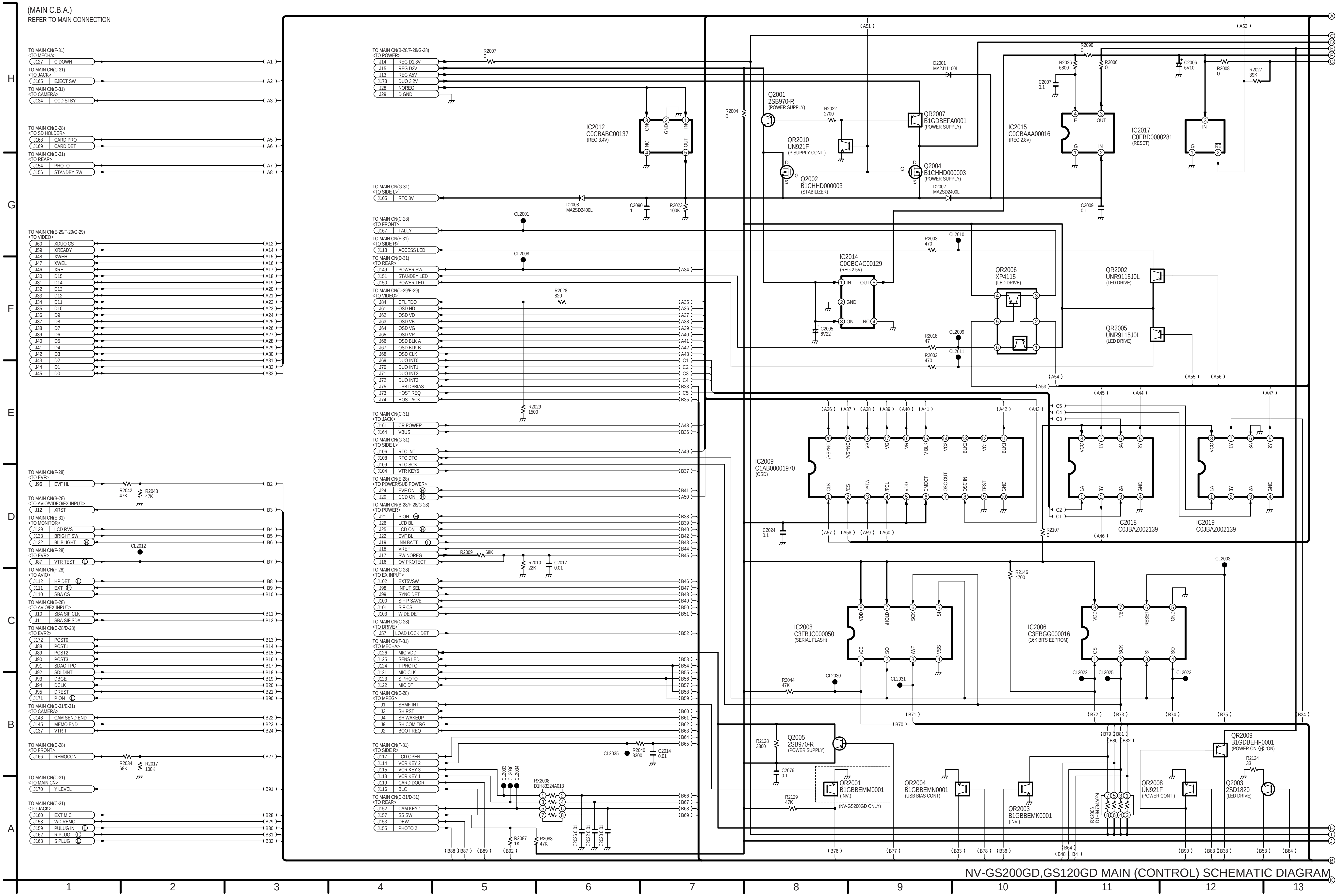
25

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-GS200GD,GS120GD MAIN (CONTROL) SCHEMATIC DIAGRAM

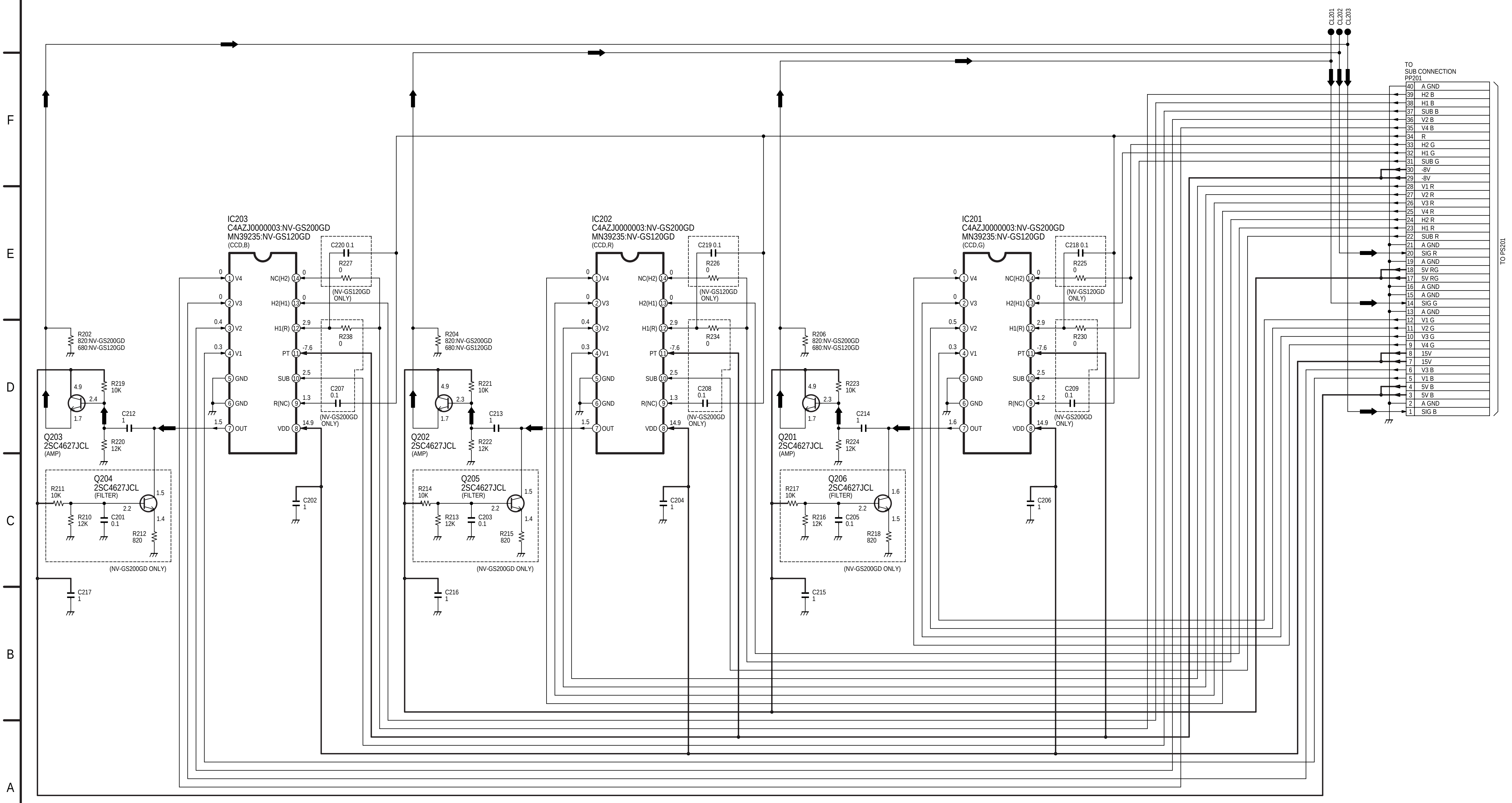
NV-GS200GD,GS120GD MAIN (CONTROL) SCHEMATIC DIAGRAM


(MAIN C.B.A.)
REFER TO MAIN CONNECTION
TO MAIN CN(F-31) <TO MECHA> J127 C DOWN
TO MAIN CN(C-31) <TO JACK> J165 EJECT SW
TO MAIN CN(E-31) <TO CAMERA> J134 CCD STBY
TO MAIN CN(C-28) <TO SD HOLDER> J168 CARD PRO J169 CARD DET
TO MAIN CN(D-31) <TO REAR> J154 PHOTO J156 STANDBY SW
TO MAIN CN(E-29/F-29/G-29) <TO VIDEO> J60 XDUO CS J59 XREADY J48 XWEH J47 XWEL J46 XRE J30 D15 J31 D14 J32 D13 J33 D12 J34 D11 J35 D10 J36 D9 J37 D8 J38 D7 J39 D6 J40 D5 J41 D4 J42 D3 J43 D2 J44 D1 J45 D0
TO MAIN CN(F-28) <TO EVF> J96 EVF HL
R2042 47K
R2043 47K
TO MAIN CN(B-28) <TO AVIO/VIDEO/EX INPUT> J12 XRST
TO MAIN CN(E-31) <TO MONITOR> J129 LCD RVS J133 BRIGHT SW J132 BL BLIGHT
CL2012
TO MAIN CN(E-28) <TO EVR> J87 VTR TEST
TO MAIN CN(F-28) <TO AVIO> J112 HP DET J111 EXT J110 SBA CS
TO MAIN CN(E-28) <TO AVIO/EX INPUT> J10 SBA SIF CLK J11 SBA SIF SDA
TO MAIN CN(C-28/D-28) <TO EVR2> J172 PCST0 J88 PCST1 J89 PCST2 J90 PCST3 J91 SDAO TPC J92 SDI DINT J93 DBGE J94 DCLK J95 DREST J171 P ON
TO MAIN CN(D-31/E-31) <TO CAMERA> J148 CAM SEND END J145 MEMO END J137 VTR T
TO MAIN CN(C-28) <TO FRONT> J166 REMOCON
R2034 68K
R2017 100K
TO MAIN CN(C-31) <TO MAIN CN> J170 Y LEVEL
TO MAIN CN(C-31) <TO JACK> J160 EXT MIC J158 WD REMO J159 PULUG IN J162 R PLUG J163 S PLUG
TO MAIN CN(B-28/F-28/G-28) <TO POWER> J14 REG D1.8V J15 REG D3V J13 REG A5V J173 DUO 3.2V J28 NOREG J29 D GND
R2007 0
TO MAIN CN(G-31) <TO SIDE L> J105 RTC 3V
D2008 MA2SD2400L
C2090 1
R2023 100K
IC2012 C0CBABC00137 (REG 3.4V)
TO MAIN CN(C-28) <TO FRONT> J167 TALLY
CL2001
TO MAIN CN(F-31) <TO SIDE R> J118 ACCESS LED
CL2008
TO MAIN CN(D-31) <TO REAR> J149 POWER SW J151 STANDBY LED J150 POWER LED
R2028 820
TO MAIN CN(D-29/E-29) <TO VIDEO> J84 CTL TDO J61 OSD HD J62 OSD VD J63 OSD VB J64 OSD VG J65 OSD VR J66 OSD BLK A J67 OSD BLK B J68 OSD CLK J69 DUO INT0 J70 DUO INT1 J71 DUO INT2 J72 DUO INT3 J75 USB DPBIAS J73 HOST REQ J74 HOST ACK
R2029 1500
TO MAIN CN(C-31) <TO JACK> J161 CR POWER J164 VBUS
TO MAIN CN(G-31) <TO SIDE L> J106 RTC INT J108 RTC DTO J109 RTC SCK J104 VTR KEY5
TO MAIN CN(E-28) <TO POWER/SUB POWER> J24 EVF ON J20 CCD ON
TO MAIN CN(B-28/F-28/G-28) <TO POWER> J21 P ON J26 LCD BL J25 LCD ON J22 EVF BL J19 INN BATT J18 VREF J17 SW NOREG J16 OV PROTECT
R2009 68K
R2010 22K
C2017 0.01
TO MAIN CN(C-28) <TO EX INPUT> J102 EXT5VSW J98 INPUT SEL J99 SYNC DET J100 SIF P SAVE J101 SIF CS J103 WIDE DET
TO MAIN CN(C-28) <TO DRIVE> J57 LOAD LOCK DET
TO MAIN CN(F-31) <TO MECHA> J126 MIC VDD J125 SENS LED J124 T PHOTO J121 MIC CLK J123 S PHOTO J122 MIC DT
TO MAIN CN(E-28) <TO MPEG> J1 SHMF INT J3 SH RST J4 SH WAKEUP J9 SH COM TRG J2 BOOT REQ
CL2035
R2040 3300
C2014 0.01
TO MAIN CN(F-31) <TO SIDE R> J117 LCD OPEN J114 VCR KEY 2 J115 VCR KEY 3 J113 VCR KEY 1 J119 CARD DOOR J116 BLC
CL2033 CL2036 CL2034
RX2008 D1H83224A013
TO MAIN CN(C-31/D-31) <TO REAR> J152 CAM KEY 1 J157 SS SW J153 DEW J155 PHOTO 2
R2087 1K
R2088 47K
C2026 0.01 C2022 0.01 C2020 0.01
Q2001 2SB970-R (POWER SUPPLY)
R2004 0
R2022 2700
QR2010 UN921F (P.SUPPLY CONT.)
Q2002 B1CHHD000003 (STABILIZER)
QR2007 B1GDBEFA0001 (POWER SUPPLY)
Q2004 B1CHHD000003 (POWER SUPPLY)
D2001 MA2J11100L
D2002 MA2SD2400L
IC2014 C0CBCAC00129 (REG 2.5V)
C2005 6V22
IC2015 C0CBAAA00016 (REG.2.8V)
R2026 6800
R2090 0
R2006 0
C2007 0.1
C2009 0.1
C2006 6V10
R2008 0
R2027 39K
IC2017 C0EBD0000281 (RESET)
R2003 470
CL2010
QR2006 XP4115 (LED DRIVE)
QR2002 UNR9115J0L (LED DRIVE)
QR2005 UNR9115J0L (LED DRIVE)
R2018 47
CL2009
R2002 470
CL2011
IC2009 C1AB00001970 (OSD)
/HSYNC /VSYNC VB VG VR V BLK VC2 BLK2 VC1 BLK1
CLK /CS DATA /PCL VDD CMDCT OSC OUT OSC IN TEST GND
C2024 0.1
R2107 0
IC2018 C0JBAZ002139
IC2019 C0JBAZ002139
VCC 1Y 3A 2Y 1A 3Y 2A GND
R2146 4700
CL2003
IC2008 C3FBJC000050 (SERIAL FLASH)
VDD /HOLD SCK SI CE SO /WP VSS
IC2006 C3EBGG000016 (16K BITS EEPROM)
VDD P/B RESET GND CS SCK SI SO
R2044 47K
CL2030 CL2031 CL2022 CL2025 CL2023
Q2005 2SB970-R (POWER SUPPLY)
R2128 3300
C2076 0.1
R2129 47K
QR2001 B1GBBEMM0001 (INV.) (NV-GS200GD ONLY)
QR2004 B1GBBEMN0001 (USB BIAS CONT)
QR2003 B1GBBEMK0001 (INV.)
RX2006 D1H84734A024
QR2008 UN921F (POWER CONT.)
QR2009 B1GDBEHF0001 (POWER ON H :ON)
R2124 33
Q2003 2SD1820 (LED DRIVE)
A B C D E F G H J K
1 2 3 4 5 6 7 8 9 10 11 12 13
H G F E D C B A

NV-GS200GD,GS120GD MAIN (CONTROL) SCHEMATIC DIAGRAM

(CCD FLEX.CARD C.B.A.)

:VIDEO MAIN SIGNAL PATH


IC203
C4AZJ0000003:NV-GS200GD
MN39235:NV-GS120GD
(CCD,B)
IC202
C4AZJ0000003:NV-GS200GD
MN39235:NV-GS120GD
(CCD,R)
IC201
C4AZJ0000003:NV-GS200GD
MN39235:NV-GS120GD
(CCD,G)
V4
V3
V2
V1
GND
GND
OUT
NC(H2)
H2(H1)
H1(R)
PT
SUB
R(NC)
VDD
C220 0.1
R227 0
C219 0.1
R226 0
C218 0.1
R225 0
(NV-GS120GD ONLY)
R238 0
R234 0
R230 0
C207 0.1
C208 0.1
C209 0.1
(NV-GS200GD ONLY)
Q203
2SC4627JCL
(AMP)
Q202
2SC4627JCL
(AMP)
Q201
2SC4627JCL
(AMP)
Q204
2SC4627JCL
(FILTER)
Q205
2SC4627JCL
(FILTER)
Q206
2SC4627JCL
(FILTER)
R202 820:NV-GS200GD 680:NV-GS120GD
R204 820:NV-GS200GD 680:NV-GS120GD
R206 820:NV-GS200GD 680:NV-GS120GD
R219 10K
R221 10K
R223 10K
R220 12K
R222 12K
R224 12K
C212 1
C213 1
C214 1
R211 10K
R214 10K
R217 10K
R210 12K
R213 12K
R216 12K
C201 0.1
C203 0.1
C205 0.1
R212 820
R215 820
R218 820
C202 1
C204 1
C206 1
C217 1
C216 1
C215 1
(NV-GS200GD ONLY)
CL201
CL202
CL203
TO SUB CONNECTION PP201
40 A GND
39 H2 B
38 H1 B
37 SUB B
36 V2 B
35 V4 B
34 R
33 H2 G
32 H1 G
31 SUB G
30 -8V
29 -8V
28 V1 R
27 V2 R
26 V3 R
25 V4 R
24 H2 R
23 H1 R
22 SUB R
21 A GND
20 SIG R
19 A GND
18 5V RG
17 5V RG
16 A GND
15 A GND
14 SIG G
13 A GND
12 V1 G
11 V2 G
10 V3 G
9 V4 G
8 15V
7 15V
6 V3 B
5 V1 B
4 5V B
3 5V B
2 A GND
1 SIG B
TO PS201
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11

NOTE:
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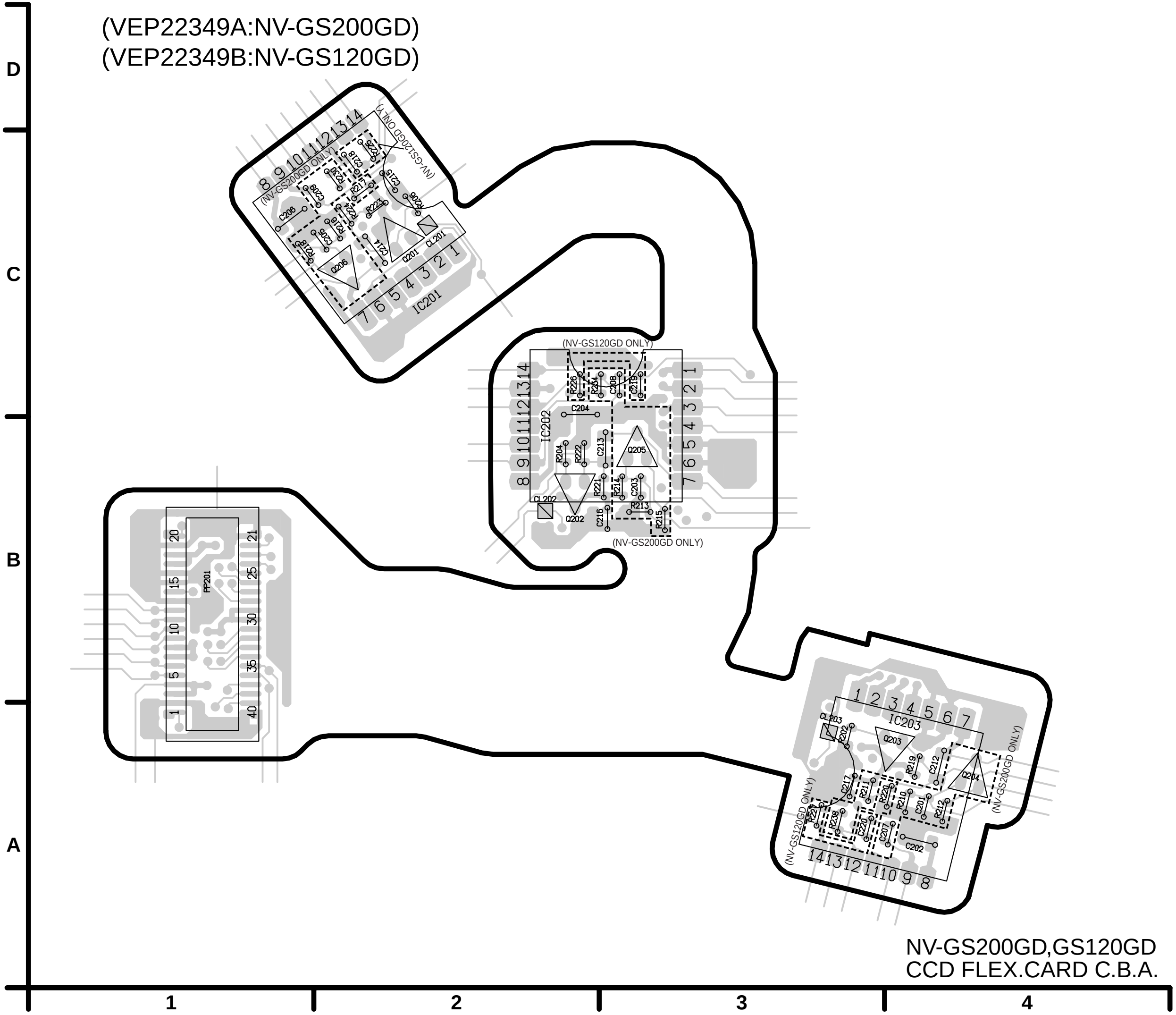
NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

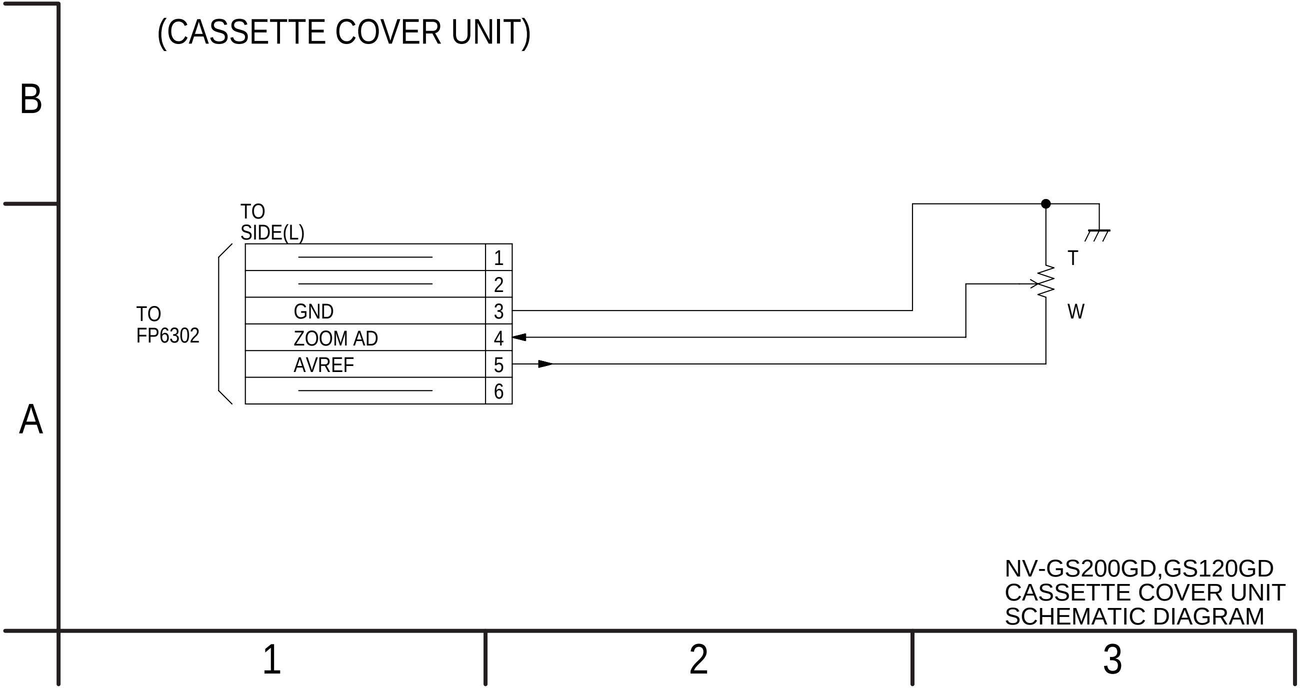
NV-GS120GD,GS200GD
CCD FLEX. CARD
SCHEMATIC DIAGRAM

(VEP22349A:NV-GS200GD)
(VEP22349B:NV-GS120GD)

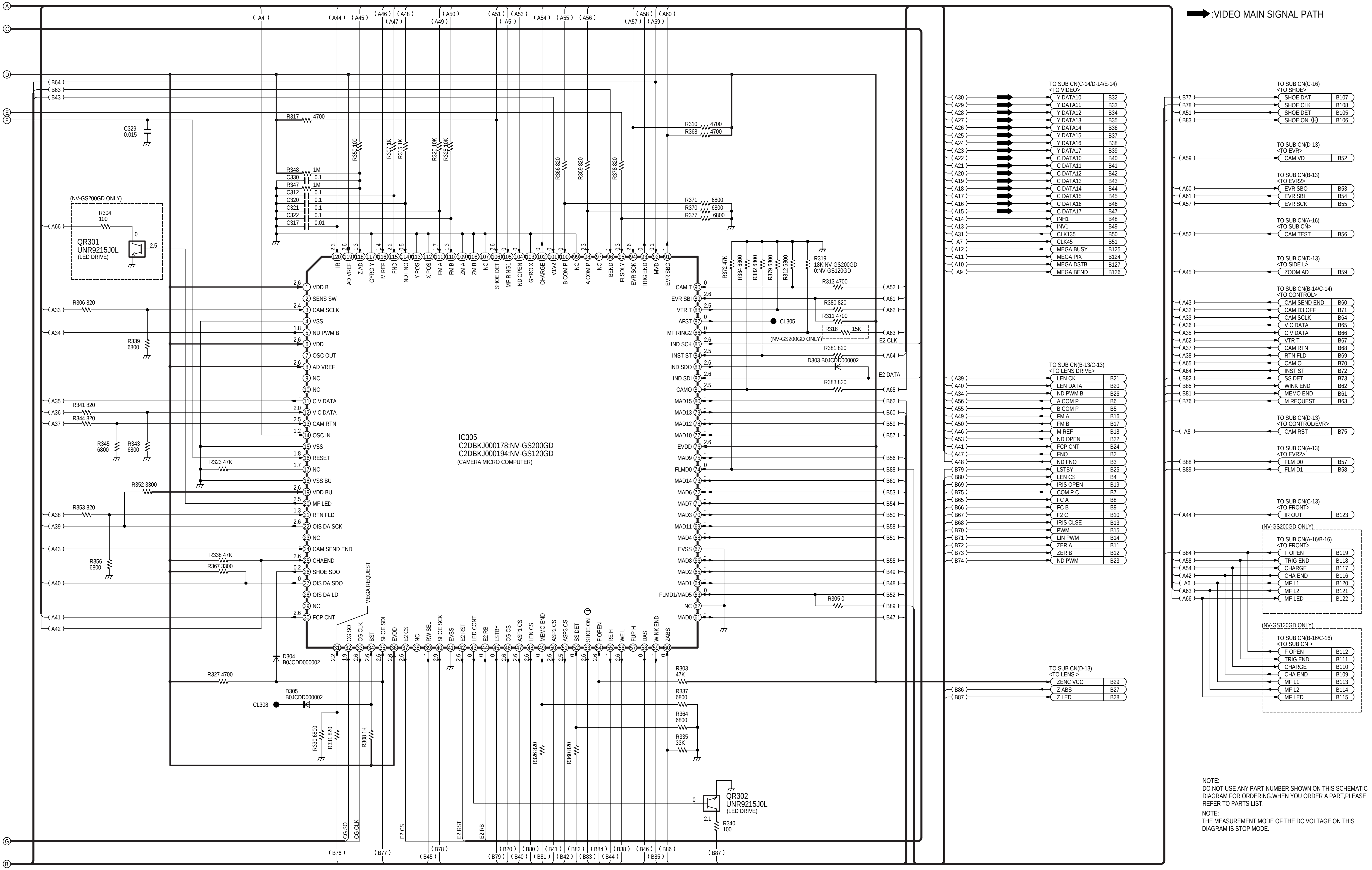

D
C
B
A
1
2
3
4
(NV-GS200GD ONLY)
(NV-GS120GD ONLY)
IC201
IC202
IC203
PP201
Q201
Q202
Q203
Q204
Q205
Q206
CL201
CL202
CL203
C201
C202
C203
C204
C205
C206
C207
C208
C209
C212
C213
C214
C215
C216
C217
C218
C219
C220
R202
R204
R206
R210
R211
R212
R213
R214
R215
R216
R217
R218
R219
R220
R221
R222
R223
R224
R226
R227
R238
1
5
10
15
20
21
25
30
35
40

NV-GS200GD,GS120GD
CCD FLEX.CARD C.B.A.

(CASSETTE COVER UNIT)


B
A
TO
SIDE(L)
TO
FP6302
1
2
GND 3
ZOOM AD 4
AVREF 5
6
T
W
1
2
3

NV-GS200GD,GS120GD
CASSETTE COVER UNIT
SCHEMATIC DIAGRAM

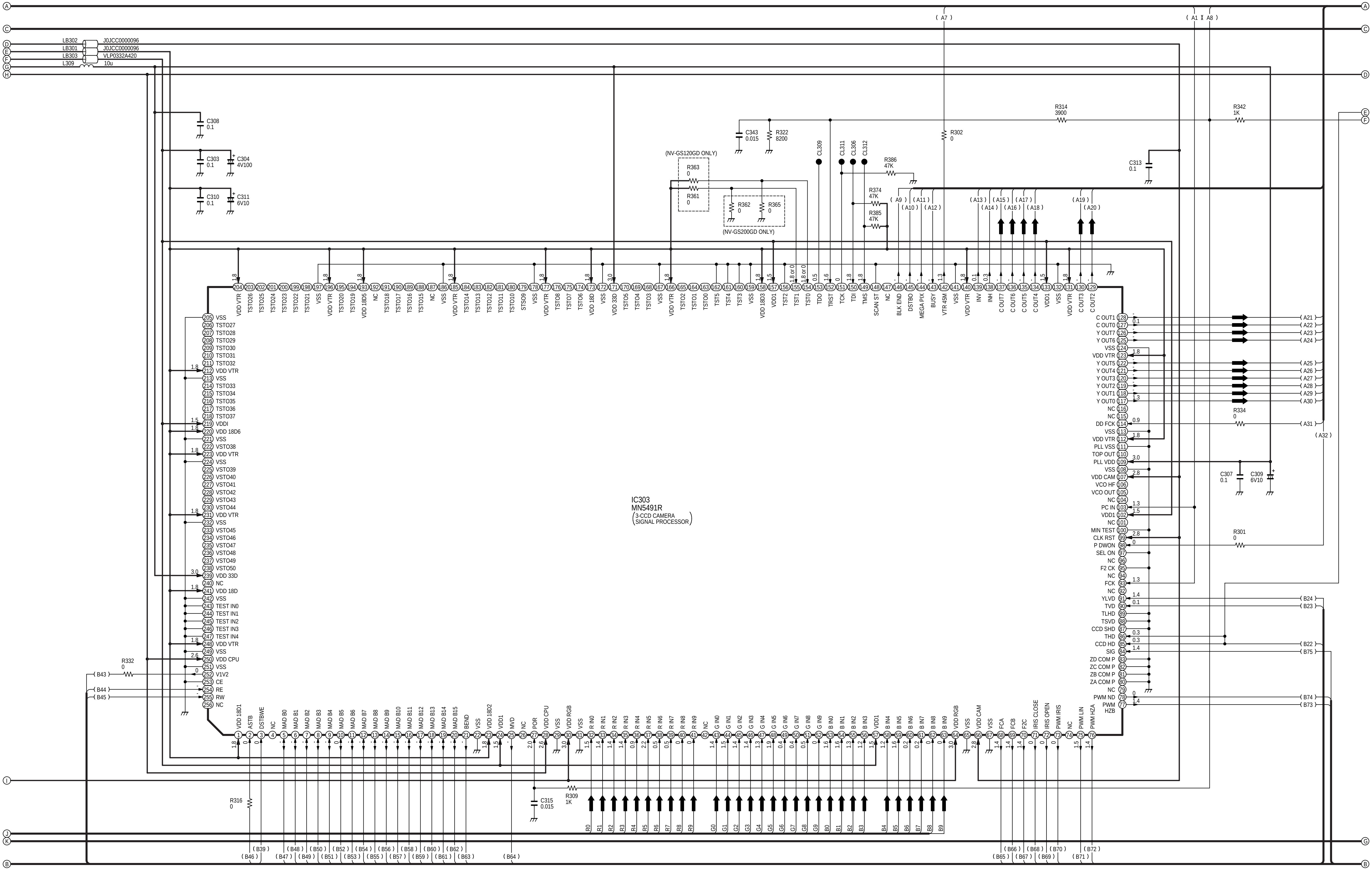

:VIDEO MAIN SIGNAL PATH
IC305
C2DBKJ000178:NV-GS200GD
C2DBKJ000194:NV-GS120GD
(CAMERA MICRO COMPUTER)
QR301
UNR9215J0L
(LED DRIVE)
(NV-GS200GD ONLY)
QR302
UNR9215J0L
(LED DRIVE)
D303 B0JCDD000002
D304 B0JCDD000002
D305 B0JCDD000002
CL305
CL308
TO SUB CN(C-14/D-14/E-14)
<TO VIDEO>
TO SUB CN(B-13/C-13)
<TO LENS DRIVE>
TO SUB CN(D-13)
<TO LENS >
TO SUB CN(C-16)
<TO SHOE>
TO SUB CN(D-13)
<TO EVR>
TO SUB CN(B-13)
<TO EVR2>
TO SUB CN(A-16)
<TO SUB CN>
TO SUB CN(D-13)
<TO SIDE L>
TO SUB CN(B-14/C-14)
<TO CONTROL>
TO SUB CN(D-13)
<TO CONTROL/EVR>
TO SUB CN(A-13)
<TO EVR2>
TO SUB CN(C-13)
<TO FRONT>
(NV-GS200GD ONLY)
TO SUB CN(A-16/B-16)
<TO FRONT>
(NV-GS120GD ONLY)
TO SUB CN(B-16/C-16)
<TO SUB CN >
A
B
C
D
E
F
G
H

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM

NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM


IC303
MN5491R
(3-CCD CAMERA SIGNAL PROCESSOR)
LB302 J0JCC0000096
LB301 J0JCC0000096
LB303 VLP0332A420
L309 10u
C308 0.1
C303 0.1
C304 4V100
C310 0.1
C311 6V10
C343 0.015
R322 8200
(NV-GS120GD ONLY)
R363 0
R361 0
R362 0
R365 0
(NV-GS200GD ONLY)
CL309
CL311
CL306
CL312
R386 47K
R374 47K
R385 47K
R302 0
R314 3900
R342 1K
C313 0.1
R334 0
C307 0.1
C309 6V10
R301 0
R332 0
R316 0
C315 0.015
R309 1K
VDD VTR
TSTO26
TSTO25
TSTO24
TSTO23
TSTO22
TSTO21
VSS
TSTO20
TSTO19
VDD 18D5
NC
TSTO18
TSTO17
TSTO16
TSTO15
TSTO14
TSTO13
TSTO12
TSTO11
TSTO10
STSO9
TSTO8
TSTO7
TSTO6
VDD 18D
VDD 33D
TSTO5
TSTO4
TSTO3
TSTO2
TSTO1
TSTO0
TST5
TST4
TST3
VDD 18D3
VDD1
TST2
TST1
TST0
TDO
TRST
TCK
TDI
TMS
SCAN ST
BLK END
DSTBO
MEGA PIX
BUSY
VTR 45M
INV
INH
C OUT7
C OUT6
C OUT5
C OUT4
C OUT3
C OUT2
C OUT1
C OUT0
Y OUT7
Y OUT6
Y OUT5
Y OUT4
Y OUT3
Y OUT2
Y OUT1
Y OUT0
DD FCK
PLL VSS
TOP OUT
PLL VDD
VDD CAM
VCO HF
VCO OUT
PC IN
VDD1
MIN TEST
CLK RST
P DWON
SEL ON
F2 CK
FCK
YLVD
TVD
TLHD
TSVD
CCD SHD
THD
CCD HD
SIG
ZD COM P
ZC COM P
ZB COM P
ZA COM P
PWM ND
PWM HZB
TSTO27
TSTO28
TSTO29
TSTO30
TSTO31
TSTO32
TSTO33
TSTO34
TSTO35
TSTO36
TSTO37
VDDI
VDD 18D6
VSTO38
VSTO39
VSTO40
VSTO41
VSTO42
VSTO43
VSTO44
VSTO45
VSTO46
VSTO47
VSTO48
VSTO49
VSTO50
TEST IN0
TEST IN1
TEST IN2
TEST IN3
TEST IN4
VDD CPU
V1V2
CE
RE
RW
VDD 18D1
ASTB
DSTBWE
MAD B0
MAD B1
MAD B2
MAD B3
MAD B4
MAD B5
MAD B6
MAD B7
MAD B8
MAD B9
MAD B10
MAD B11
MAD B12
MAD B13
MAD B14
MAD B15
BEND
VDD 18D2
MVD
POR
VDD RGB
R IN0
R IN1
R IN2
R IN3
R IN4
R IN5
R IN6
R IN7
R IN8
R IN9
G IN0
G IN1
G IN2
G IN3
G IN4
G IN5
G IN6
G IN7
G IN8
G IN9
B IN0
B IN1
B IN2
B IN3
B IN4
B IN5
B IN6
B IN7
B IN8
B IN9
FCA
FCB
F2C
IRIS CLOSE
IRIS OPEN
PWM IRIS
PWM LIN
PWM HZA
R0
R1
R2
R3
R4
R5
R6
R7
R8
R9
G0
G1
G2
G3
G4
G5
G6
G7
G8
G9
B0
B1
B2
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A1
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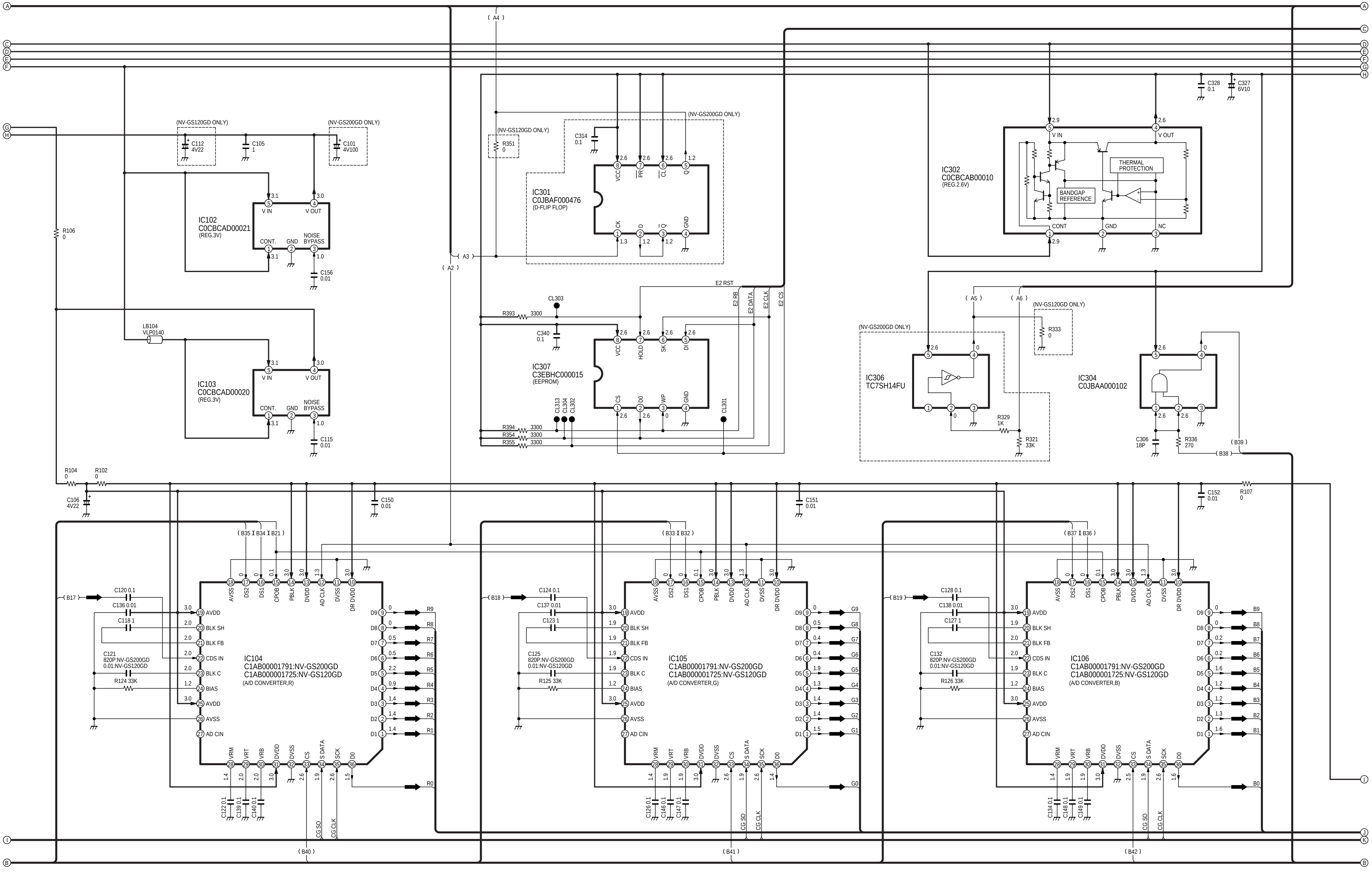
B71
B72
B73
B74
B75
A
B
C
D
E
F
G
H
I
J
K
L

NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM

NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM

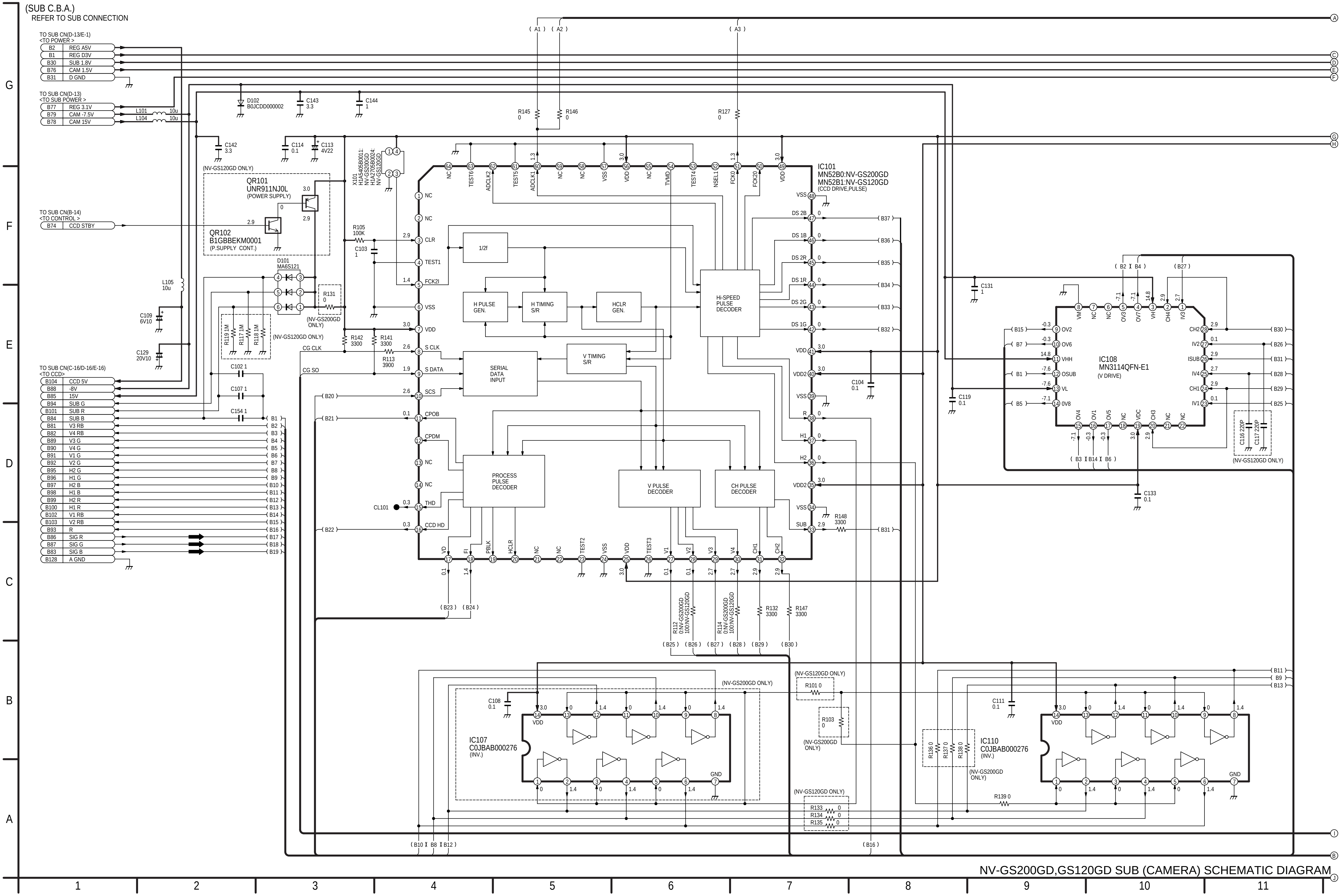
23 24 25 26 27 28 29 30 31 32 33 34


IC102
C0CBCAD00021
(REG.3V)
IC103
C0CBCAD00020
(REG.3V)
V IN
V OUT
CONT.
GND
NOISE BYPASS
(NV-GS120GD ONLY)
(NV-GS200GD ONLY)
C112 4V22
C105 1
C101 4V100
C156 0.01
C115 0.01
R106 0
LB104 VLP0140
IC301
C0JBAF000476
(D-FLIP FLOP)
C314 0.1
R351 0
VCC
PR
CL
Q
CK
D
Q
GND
IC307
C3EBHC000015
(EEPROM)
CL303
C340 0.1
R393 3300
R394 3300
R354 3300
R355 3300
HOLD
SK
DI
CS
D0
WP
CL313
CL304
CL302
CL301
E2 RST
E2 RB
E2 DATA
E2 CLK
E2 CS
IC302
C0CBCAB00010
(REG.2.6V)
THERMAL PROTECTION
BANDGAP REFERENCE
NC
C328 0.1
C327 6V10
IC306
TC7SH14FU
R333 0
R329 1K
R321 33K
IC304
C0JBAA000102
C306 18P
R336 270
R104 0
R102 0
C106 4V22
C150 0.01
C151 0.01
C152 0.01
R107 0
IC104
C1AB00001791:NV-GS200GD
C1AB000001725:NV-GS120GD
(A/D CONVERTER,R)
IC105
C1AB00001791:NV-GS200GD
C1AB000001725:NV-GS120GD
(A/D CONVERTER,G)
IC106
C1AB00001791:NV-GS200GD
C1AB000001725:NV-GS120GD
(A/D CONVERTER,B)
AVSS
DS2
DS1
CPOB
PBLK
DVDD
AD CLK
DVSS
DR DVDD
AVDD
BLK SH
BLK FB
CDS IN
BLK C
BIAS
AD CIN
VRM
VRT
VRB
S DATA
SCK
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
C120 0.1
C136 0.01
C118 1
C121 820P:NV-GS200GD 0.01:NV-GS120GD
R124 33K
C124 0.1
C137 0.01
C123 1
C125 820P:NV-GS200GD 0.01:NV-GS120GD
R125 33K
C128 0.1
C138 0.01
C127 1
C132 820P:NV-GS200GD 0.01:NV-GS120GD
R126 33K
C122 0.1
C139 0.1
C140 0.1
C126 0.1
C146 0.1
C147 0.1
C134 0.1
C148 0.1
C149 0.1
CG SO
CG CLK
R0 R1 R2 R3 R4 R5 R6 R7 R8 R9
G0 G1 G2 G3 G4 G5 G6 G7 G8 G9
B0 B1 B2 B3 B4 B5 B6 B7 B8 B9
A2 A3 A4 A5 A6
B17 B18 B19
B21 B32 B33 B34 B35 B36 B37 B38 B39 B40 B41 B42
A B C D E F G H I J K L

NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM

NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM

12 13 14 15 16 17 18 19 20 21 22


(SUB C.B.A.)
REFER TO SUB CONNECTION
TO SUB CN(D-13/E-1)
<TO POWER >
B2 REG A5V
B1 REG D3V
B30 SUB 1.8V
B76 CAM 1.5V
B31 D GND
TO SUB CN(D-13)
<TO SUB POWER >
B77 REG 3.1V
B79 CAM -7.5V
B78 CAM 15V
L101 10u
L104 10u
D102 B0JCDD000002
C143 3.3
C144 1
C142 3.3
C114 0.1
C113 4V22
(NV-GS120GD ONLY)
QR101 UNR911NJ0L (POWER SUPPLY)
QR102 B1GBBEKM0001 (P.SUPPLY CONT.)
TO SUB CN(B-14)
<TO CONTROL >
B74 CCD STBY
D101 MA6S121
L105 10u
C109 6V10
C129 20V10
R131 0 (NV-GS200GD ONLY)
R119 1M
R117 1M
R118 1M
(NV-GS200GD ONLY)
TO SUB CN(C-16/D-16/E-16)
<TO CCD>
B104 CCD 5V
B88 -8V
B85 15V
B94 SUB G
B101 SUB R
B84 SUB B
B81 V3 RB
B82 V4 RB
B89 V3 G
B90 V4 G
B91 V1 G
B92 V2 G
B95 H2 G
B96 H1 G
B97 H2 B
B98 H1 B
B99 H2 R
B100 H1 R
B102 V1 RB
B103 V2 RB
B93 R
B86 SIG R
B87 SIG G
B83 SIG B
B128 A GND
C102 1
C107 1
C154 1
X101 H1A5406B0011: NV-GS200GD H1A2706B0024: NV-GS120GD
R105 100K
C103 1
R142 3300
R141 3300
R113 3900
CG CLK
CG SO
CL101
R145 0
R146 0
R127 0
IC101
MN52B0:NV-GS200GD
MN52B1:NV-GS120GD
(CCD DRIVE,PULSE)
1/2f
H PULSE GEN.
H TIMING S/R
HCLR GEN.
Hi-SPEED PULSE DECODER
V TIMING S/R
SERIAL DATA INPUT
PROCESS PULSE DECODER
V PULSE DECODER
CH PULSE DECODER
NC
CLR
TEST1
FCK2I
VSS
VDD
S CLK
S DATA
SCS
CPOB
CPDM
THD
CCD HD
TEST6
ADCLK2
TEST5
ADCLK1
TVMD
TEST4
NSEL1
FCK0
FCK20
DS 2B
DS 1B
DS 2R
DS 1R
DS 2G
DS 1G
VDD2
R
H1
H2
SUB
VD
FI
PBLK
HCLR
TEST2
TEST3
V1
V2
V3
V4
CH1
CH2
R148 3300
C104 0.1
R112 0:NV-GS200GD 100:NV-GS120GD
R114 0:NV-GS200GD 100:NV-GS120GD
R132 3300
R147 3300
C131 1
C119 0.1
IC108
MN3114QFN-E1
(V DRIVE)
OV2
OV6
VHH
OSUB
VL
OV8
VM
OV3
OV7
VH
CH4
IV3
CH2
IV2
ISUB
IV4
CH1
IV1
OV4
OV1
OV5
VDC
CH3
C133 0.1
C116 220P
C117 220P
(NV-GS120GD ONLY)
IC107
C0JBAB000276
(INV.)
C108 0.1
GND
(NV-GS200GD ONLY)
R101 0
R103 0
(NV-GS200GD ONLY)
R136 0
R137 0
R138 0
(NV-GS200GD ONLY)
IC110
C0JBAB000276
(INV.)
C111 0.1
R139 0
R133 0
R134 0
R135 0
(NV-GS120GD ONLY)
A1 A2 A3
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11

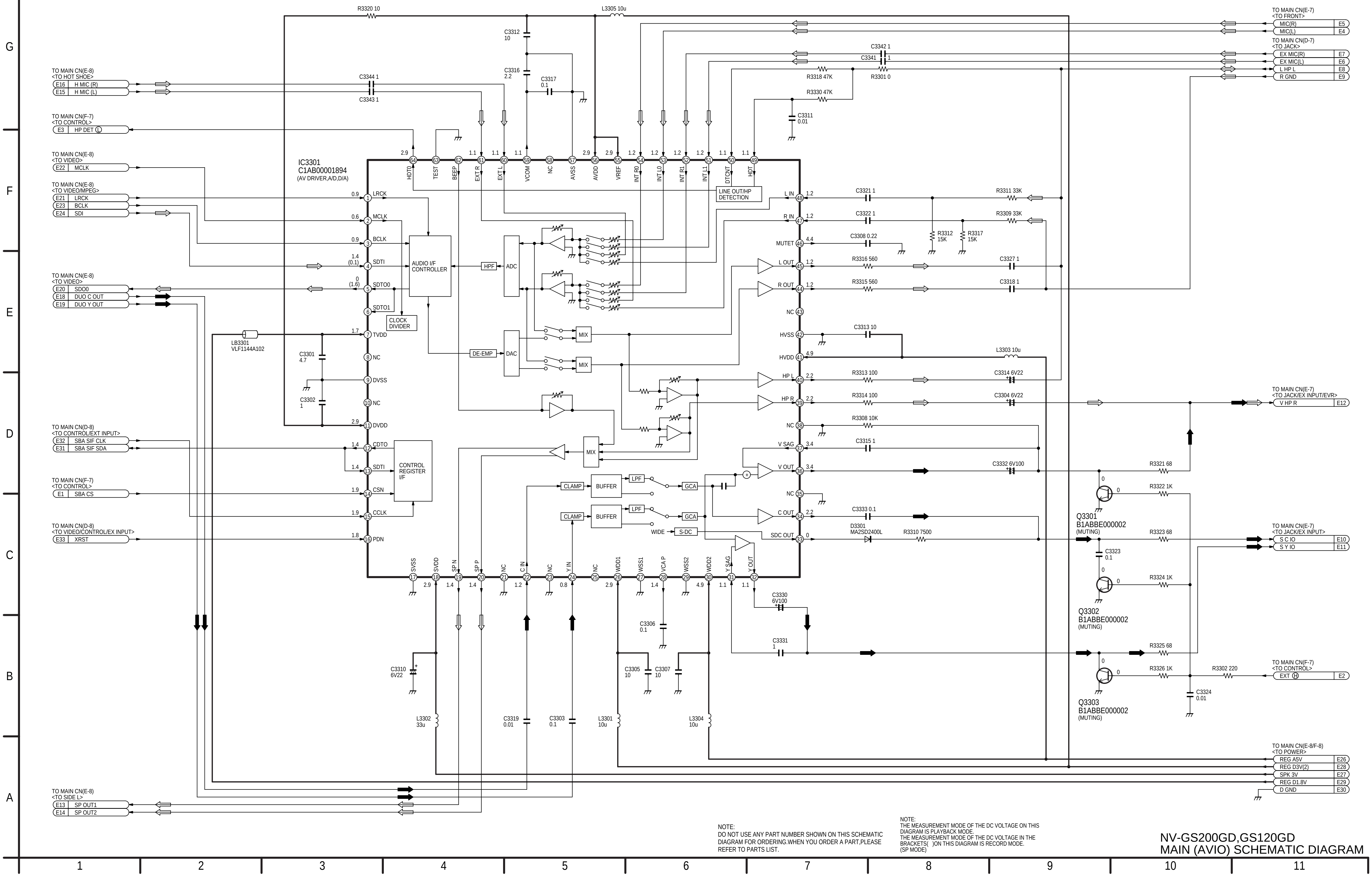
NV-GS200GD,GS120GD SUB (CAMERA) SCHEMATIC DIAGRAM

(MAIN C.B.A.)

REFER TO MAIN CONNECTION

➡ :VIDEO MAIN SIGNAL PATH

⇨ :AUDIO MAIN SIGNAL PATH



IC3301
C1AB00001894
(AV DRIVER,A/D,D/A)
AUDIO I/F CONTROLLER
CLOCK DIVIDER
CONTROL REGISTER I/F
LINE OUT/HP DETECTION
HPF
ADC
DE-EMP
DAC
MIX
CLAMP
BUFFER
LPF
GCA
S-DC
WIDE
LRCK
MCLK
BCLK
SDTI
SDTO0
SDTO1
TVDD
NC
DVSS
DVDD
CDTO
SDTI
CSN
CCLK
PDN
SVSS
SVDD
SP N
SP P
C IN
Y IN
WDD1
WSS1
VCA P
WSS2
WDD2
Y SAG
Y OUT
SDC OUT
C OUT
V OUT
V SAG
HP R
HP L
HVDD
HVSS
R OUT
L OUT
MUTET
R IN
L IN
HDT
DTCNT
INT L1
INT R1
INT L0
INT R0
VREF
AVDD
AVSS
VCOM
EXT L
EXT R
BEEP
TEST
HDT0
TO MAIN CN(E-8) <TO HOT SHOE>
E16 H MIC (R)
E15 H MIC (L)
TO MAIN CN(F-7) <TO CONTROL>
E3 HP DET Ⓛ
TO MAIN CN(E-8) <TO VIDEO>
E22 MCLK
TO MAIN CN(E-8) <TO VIDEO/MPEG>
E21 LRCK
E23 BCLK
E24 SDI
TO MAIN CN(E-8) <TO VIDEO>
E20 SDO0
E18 DUO C OUT
E19 DUO Y OUT
TO MAIN CN(D-8) <TO CONTROL/EXT INPUT>
E32 SBA SIF CLK
E31 SBA SIF SDA
TO MAIN CN(F-7) <TO CONTROL>
E1 SBA CS
TO MAIN CN(D-8) <TO VIDEO/CONTROL/EX INPUT>
E33 XRST
TO MAIN CN(E-8) <TO SIDE L>
E13 SP OUT1
E14 SP OUT2
TO MAIN CN(E-7) <TO FRONT>
MIC(R) E5
MIC(L) E4
TO MAIN CN(D-7) <TO JACK>
EX MIC(R) E7
EX MIC(L) E6
L HP L E8
R GND E9
TO MAIN CN(E-7) <TO JACK/EX INPUT/EVR>
V HP R E12
TO MAIN CN(E-7) <TO JACK/EX INPUT>
S C IO E10
S Y IO E11
TO MAIN CN(F-7) <TO CONTROL>
EXT Ⓗ E2
TO MAIN CN(E-8/F-8) <TO POWER>
REG A5V E26
REG D3V(2) E28
SPK 3V E27
REG D1.8V E29
D GND E30
R3320 10
L3305 10u
C3312 10
C3316 2.2
C3317 0.1
C3344 1
C3343 1
C3342 1
C3341 1
R3318 47K
R3301 0
R3330 47K
C3311 0.01
C3321 1
R3311 33K
C3322 1
R3309 33K
R3312 15K
R3317 15K
C3308 0.22
R3316 560
C3327 1
R3315 560
C3318 1
C3313 10
L3303 10u
R3313 100
C3314 6V22
R3314 100
C3304 6V22
R3308 10K
C3315 1
C3332 6V100
C3333 0.1
D3301 MA2SD2400L
R3310 7500
LB3301 VLF1144A102
C3301 4.7
C3302 1
C3330 6V100
C3331 1
C3306 0.1
C3310 6V22
C3305 10
C3307 10
L3302 33u
C3319 0.01
C3303 0.1
L3301 10u
L3304 10u
Q3301 B1ABBE000002 (MUTING)
Q3302 B1ABBE000002 (MUTING)
Q3303 B1ABBE000002 (MUTING)
R3321 68
R3322 1K
R3323 68
C3323 0.1
R3324 1K
R3325 68
R3326 1K
R3302 220
C3324 0.01
G
F
E
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C
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NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE.
(SP MODE)

NV-GS200GD,GS120GD
MAIN (AVIO) SCHEMATIC DIAGRAM

Pin No.	Signal Name	I/O	Explanation
123	MD4	I	Voltage
124	MD7	I	Voltage
125	BREQ	I	Voltage
126	BACK	-	NC
127	VCCQ1	I	Voltage
128	VSSQ1	-	GND
129	DREQ1/PT	I	Voltage
130	DACK1/PT	I/O	DMA Forward demand information1/PORT
131	DREQ0/PT	I	Voltage
132	DACK0/PT	I/O	DMA Forward demand information0/PORT
133	NMI	I	Power Save Cancel
134	IRQ3/PT	I	Voltage
135	VCC	I	Voltage
136	VSS	-	GND
137	IRQ2/PT	I	Voltage
138	IRQ1/PT	I	Voltage
139	IRQ0/PT	I	Voltage
140	ASEBRKAK	O	Blake Mode
141	CKE	-	NC
142	VCCQ1	I	Voltage
143	CKIO	I/O	System Clock Input-Output
144	VSSQ1	-	GND
145	AU DATA3	O	AUD data
146	AU DATA2	O	AUD data
147	AU DCK	O	AUD Clock
148	AU DATA1	O	AUD data
149	AU DATA0	O	AUD data
150	VCC	I	Voltage
151	VSS	-	GND
152	AUD SYNC	O	AUD Synchronous signal
153	TRST	I	Test Reset
154	TDO	O	Test data Output
155	TCK	I	Test Clock Input
156	TMS	I	Test Mode Select Signal
157	TDI	I	Test data Input
158	VCCQ1	I	Voltage
159	XTAL	-	NC
160	EXTAL	I	Voltage
161	VSSQ1	-	GND
162	MD8	-	GND
163	MD9	-	GND
164	RESET OUT	O	MFI Reset Output
165	VSS	-	GND
166	VCC	I	Voltage
167	RESET P	I	Power On Reset
168	VCC(PLL1)	I	Voltage
169	VSS(PLL1)	-	GND
170	VCC(PLL2)	I	Voltage
171	VSS(PLL2)	-	GND
172	VSSQ3	-	GND
173	VCCQ2	I	Voltage
174	SIUILR	I	Audio In L/R Clock
175	SIUIBT	I	Audio In Bit Clock
176	SIUISLD	I	Audio In Serial data
177	SIUOLR	O	Audio In-Out L/R Clock
178	SIUOBT	O	Audio In-Out Bit Clock
179	SIUOSLD	I	Audio Ootput Serial data
180	SIUMLK	I	Voltage
181	SHMF IMD	I	MFI Mode Change

Pin No.	Signal Name	I/O	Explanation
182	SHMF INT	O	MFI Interruption Output
183	SHMF IRD	I	MFI RW/READ
184	SHMF IEWR	I	MFI Enable/Write
185	SHMF IRS	I	MFI Registra Select
186	VCCQ2	I	Voltage
187	VSSQ3	-	GND
188	SHMF ID7	I/O	MFI data/Video data Output
189	SHMF ID6	I/O	MFI data/Video data Output
190	SHMF ID5	I/O	MFI data/Video data Output
191	SHMF ID4	I/O	MFI data/Video data Output
192	SHMF ID3	I/O	MFI data/Video data Output
193	SHMF ID2	I/O	MFI data/Video data Output
194	SHMF ID1	I/O	MFI data/Video data Output
195	SHMF ID0	I/O	MFI data/Video data Output
196	VSSQ3	-	GND
197	VCCQ2	I	Voltage
198	SHMF ICS	I	MFI Chip Select
199	YC IO7	I/O	Video data Input-Output
200	YC IO6	I/O	Video data Input-Output
201	YC IO5	I/O	Video data Input-Output
202	YC IO4	I/O	Video data Input-Output
203	YC IO3	I/O	Video data Input-Output
204	VSSQ3	-	GND
205	VCCQ2	I	Voltage
206	YC IO2	I/O	Video data Input-Output
207	YC IO1	I/O	Video data Input-Output
208	YC IO0	I/O	Video data Input-Output
209	CLK27D	O	Video Clock Out(27MHz)
210	VCC	I	Voltage
211	VSS	-	GND
212	CLK27B	I	Video Clock In(27MHz)
213	VCCQ2	I	Voltage
214	MP RAS	O	SDRAM Address Bus
215	VSSQ2	-	GND
216	MP CAS	O	SDRAM Address Bus
217	MP A13	-	NC
218	MP A12	O	SDRAM Address Bus
219	MP A11	O	SDRAM Address Bus
220	MP A10	O	SDRAM Address Bus
221	MP A9	O	SDRAM Address Bus
222	MP A8	O	SDRAM Address Bus
223	MP A7	O	SDRAM Address Bus
224	MP A6	O	SDRAM Address Bus
225	VSSQ2	-	GND
226	VCCQ2	I	Voltage
227	MP A5	O	SDRAM Address Bus
228	MP A4	O	SDRAM Address Bus
229	MP A3	O	SDRAM Address Bus
230	MP A2	O	SDRAM Address Bus
231	MP A1	O	SDRAM Address Bus
232	MP A0	O	SDRAM Address Bus
233	MP DQMU/WE3/DQM3	O	D7-0In-Out Mask/D23-16 Write Enable/DQM (SDRAM)
234	VSSQ2	-	GND
235	MP CLK	O	SDRAM Clock
236	VCCQ2	I	Voltage
237	MP DQML/WE2/DQM2	O	D7-0In-Out Mask/D23-16 Write Enable/DQM (SDRAM)
238	MP D15/ D31	I/O	SDRAM data Bus/data Bus
239	MP D14/ D30	I/O	SDRAM data Bus/data Bus
240	MP D13/ D29	I/O	SDRAM data Bus/data Bus

IC3451 : DSC CONTROL MICROCOMPUTER

Pin No.	Signal Name	I/O	Explanation
1	MP D12/D28	I/O	SDRAM data Bus/data Bus
2	MP D11/D27	I/O	SDRAM data Bus/data Bus
3	MP D10/D26	I/O	SDRAM data Bus/data Bus
4	MP D9/D25	I/O	SDRAM data Bus/data Bus
5	VCCQ2	I	Voltage
6	VSSQ2	-	GND
7	MP D8/D24	I/O	SDRAM data Bus/data Bus
8	MP WE	O	SDRAM Write Enable
9	MP D7/D23	I/O	SDRAM data Bus/data Bus
10	MP D6/D22	I/O	SDRAM data Bus/data Bus
11	MP D5/D21	I/O	SDRAM data Bus/data Bus
12	MP CKE	O	SDRAM Clock Enable
13	MP D4/D20	I/O	SDRAM data Bus/data Bus
14	MP CS	O	SDRAM Chip Select
15	VCC	I	Voltage
16	VSS	-	GND
17	MP D3/D19	I/O	SDRAM data Bus/data Bus
18	MP D2/D18	I/O	SDRAM data Bus/data Bus
19	VCCQ2	I	Voltage
20	VSSQ2	-	GND
21	MP D1/D17	I/O	SDRAM data Bus/data Bus
22	MP D0/D16	I/O	SDRAM data Bus/data Bus
23	LSIMD	I	Voltage
24	AVSS(USB)	-	GND
25	DP	I	Voltage
26	DM	I	Voltage
27	AVCC(USB)	I	Voltage
28	VBUS/PT	-	GND
29	TEST3	I	Voltage
30	VCC	I	Voltage
31	VSS	-	GND
32	TEST2	I	Voltage
33	TEST1	I	Voltage
34	TEST0	I	Voltage
35	VCKMD	I	Voltage
36	WE0/DQM0	O	D7-0WE/DQM(SDRAM)
37	WE1/DOM1	O	D15-8WE/DQM(SDRAM)
38	D15	I/O	data Bus
39	VCCQ1	I	Voltage
40	VSSQ1	-	GND
41	D14	I/O	data Bus
42	D13	I/O	data Bus
43	D12	I/O	data Bus
44	D11	I/O	data Bus
45	D10	I/O	data Bus
46	VSS	-	GND
47	VCC	I	Voltage
48	TAP SEL	I	Voltage
49	D9	I/O	data Bus
50	D8	I/O	data Bus
51	D7	I/O	data Bus
52	D6	I/O	data Bus
53	D5	I/O	data Bus
54	VSSQ1	-	GND
55	VCCQ1	I	Voltage
56	D4	I/O	data Bus
57	D3	I/O	data Bus
58	D2	I/O	data Bus
59	D1	I/O	data Bus
60	D0	I/O	data Bus
61	A0/BS/PT	-	NC
62	A1	O	Address Bus
63	A2	O	Address Bus
64	A3	O	Address Bus
65	A4	O	Address Bus
66	VSSQ1	-	GND
67	VCCQ1	I	Voltage
68	A5	O	Address Bus
69	A6	O	Address Bus
70	A7	O	Address Bus
71	SD CD	I	Voltage
72	A8	O	Address Bus
73	A9	O	Address Bus
74	SD WP/PT	I	SD Write Protect Signal/Port
75	A10	O	Address Bus
76	A11	O	Address Bus
77	A12	O	Address Bus
78	A13	O	Address Bus
79	VCCQ1	I	Voltage
80	VSSQ1	-	GND
81	A14	O	Address Bus
82	A15	O	Address Bus
83	A16	O	Address Bus
84	SD DO/PT	I	Voltage
85	A17	O	Address Bus
86	A18	O	Address Bus
87	SD D1/PT	I	Voltage
88	A19	O	Address Bus
89	VCC	I	Voltage
90	UCLK	I	Voltage
91	VSS	-	GND
92	A20	O	Address Bus
93	A21/PT	-	NC
94	A22/PT	-	NC
95	VSSQ1	-	GND
96	VCCQ1	I	Voltage
97	A23/PT	-	NC
98	A24/CAS/PT	-	NC
99	SD D2/PT	I	Voltage
100	A25/RAS/PT	-	NC
101	SD D3/PT	I	Voltage
102	RD	O	Read Signal
103	ASEMD0	I	Voltage
104	MD0	-	GND
105	STATUS0	O	Processor Status Out
106	SD CLK	-	NC
107	VSSQ1	-	GND
108	VCCQ1	I	Voltage
109	SD CMD/PT	I	Voltage
110	RDWR	-	NC
111	MD1	I	Voltage
112	WAIT	I	Voltage
113	SCIF TXD/PT	O	Serial Transmission data/Port
114	SCIF RXD/PT	I	Serial Reception data/Port
115	SCIF SCK/PT	I	Serial Clock Input-Output/Port
116	CS0	O	Chip Select 0
117	CS3/PT	I/O	Chip Select 3/Port
118	CS4/PT	-	NC
119	CS5A/PT	O	Chip Select 5A/Port
120	CS5B/PT	O	Chip Select 5B/Port
121	MD2	I	Voltage
122	MD3	-	GND

Pin No.	Signal Name	I/O	Explanation
245	NC	-	NC
246	STNDBY LED	O	STNDBY LED
247	POWER LED	O	POWER LED
248	TALLY LED	O	TALLY LED
249	NC	-	NC
250	DVSS	-	GND
251	NC	-	NC
252	DVCC2	I	Voltage
253	AVSS	-	GND
254	LOAD LOCK DET	I	Finger scissors detection
255	AVCC32	I	Voltage
256	T PHOTO	I	T Photo Input
257	BATT D	I	D Terminal input
258	S PHOTO	I	S Photo In
259	MIC AD1	I	Contact ID Input
260	MIC AD2	I	Contact ID Input
261	MIC AD3	I	Contact ID Input
262	AVSS	-	GND
263	VCR KEY 1	I	Analogue key Input
264	CAM KEY 1	I	Analogue key Input
265	NC	-	GND
266	BLC	I	BLC
267	REGD3V DET	I	Shutdown Detect
268	BATT REF	I	Battery Input
269	VCR KEY 3	I	Analogue key Input
270	BATTERY	I	Battery Voltage Input
271	VCR KEY 5	I	Analogue key Input
272	VCR KEY 2	I	Analogue key Input
273	EXT MIC	I	Outside microphone
274	Y LEVEL	O	Y LEVEL
275	NC	I	Operational amplifier Output
276	DEW	I	DEW Sensor
277	AWP DET	I	AWP Connect Detect
278	UNI REMO	I	Free Style Remote Control Input
279	WIDE DET	I	Wide Discrimination
280	VREFL	-	GND
281	VREFH	I	Voltage

Pin No.	Signal Name	I/O	Explanation
123	CAM RTN	O	Camera Microcomputer Communication
124	RTN FLD	O	Camera Microcomputer Field Signal
125	MEGA REQ	O	Mega Pixel Request
126	RST PUP	-	GND
127	E2 PROTECT	O	FLASH ROM CE
128	FLASH WP	O	FLASH ROM WP
129	DVCC32	I	Voltage
130	A3	I	Address Data
131	NC	-	NC
132	A8	I	Address Data
133	A7	I	Address Data
134	A0	-	NC
135	A2	I	Address Data
136	A12	I	Address Data
137	A11	I	Address Data
138	A6	I	Address Data
139	A15	I	Address Data
140	A10	I	Address Data
141	DVSS	-	GND
142	A14	I	Address Data
143	A5	I	Address Data
144	DVCC33	I	Voltage
145	A1	I	Address Data
146	MODE14	-	GND
147	A13	-	Address Data
148	A16	-	NC
149	A4	I	Address Data
150	A9	I	Address Data
151	A18	-	NC
152	PHOTO SW	I	Photo Key Input
153	TEST4	-	GND
154	D(2)	I/O	Data Bus
155	STNDBY SW	I	Standby SW
156	CARD DET	I	SD Card Exists and No
157	SD PROTECT	I	SD Card Protect
158	TEST3	-	GND
159	D(0)	I/O	Data Bus
160	DVSS	-	GND
161	NC	-	NC
162	D(1)	I/O	Data Bus
163	D(6)	I/O	Data Bus
164	D(3)	I/O	Data Bus
165	D(5)	I/O	Data Bus
166	D(4)	I/O	Data Bus
167	FVSS	-	GND
168	FVCC2	I	Voltage
169	D(9)	I/O	Data Bus
170	TEST0	-	GND
171	D(8)	I/O	Data Bus
172	D(7)	I/O	Data Bus
173	D(10)	I/O	Data Bus
174	D(13)	I/O	Data Bus
175	D(11)	I/O	Data Bus
176	D(12)	I/O	Data Bus
177	DVCC33	I	Voltage
178	EVF BL	O	EVF Backright On:H
179	D(15)	I/O	Data Bus
180	SH MFI MD	O	MF ID Bas Mode Selection
181	DVSS	-	GND
182	XDUO CS	O	DUO Chip Select
183	XWEH	O	X Write Strobe H
184	XREADY	I	X Ready Strobe
185	XRE	O	X Read Strobe
186	FVSS	-	GND
187	FVCC2	I	Voltage
188	D(14)	I/O	Data Bus
189	NC	-	NC
190	CCD STBY	O	CCD Standby
191	CCD ON Ⓗ	O	CCD Power ON/OFF
192	LCD ON Ⓗ	O	LCD Power ON/OFF
193	XWEL	O	X Write Strobe L
194	TEST2	-	GND
195	DVCC33	I	Voltage
196	DVCC2	I	Voltage
197	NC	-	NC
198	X RAM CS	-	NC
199	NC	-	NC
200	XTI	-	NC
201	CVCCH	-	GND
202	CAP1	-	GND
203	CAP2	-	GND
204	XT2	-	NC
205	TDO	O	Test Data Output
206	TDI	I	Test Data Input
207	TMS	I	JTAG Mode
208	TRST	-	NC
209	TCK	I	JTAG Clock
210	DVCC34	I	Voltage
211	CVCC2	I	Voltage
212	XI	I	Crystal 13.5MHz
213	CVSS	-	GND
214	X2	O	Crystal 13.5MHz
215	NC	-	NC
216	CASS DOWN	I	Cassette Down
217	LCD BL	O	LCD Backright On:H
218	SHMFINT	I	MPEG IC Interruption
219	NC	-	NC
220	DUO INT3	I	Video IC Interruption 3
221	DUO INT2	I	Video IC Interruption 2
222	DUO INT1	I	Video IC Interruption 1
223	DVSS	-	GND
224	HP DET Ⓛ	I	Headphone Judgement
225	TIMER INT	I	Clock one minute Interruption
226	NC	-	NC
227	DUO INTO	I	Video IC Interruption 0
228	EXT Ⓗ	O	Analogue Input:H
229	CR POWER	I	AWP Power supply control
230	NC	-	NC
231	EJECT SW	I	EJECT SW
232	NC	-	NC
233	ACCESS LED	O	Access LED
234	OSD CS	O	OSD IC CS
235	POWER SW	I	Power SW In
236	OSD RST	O	OSD IC Reset
237	NC	-	NC
238	SH RST	O	Reset Signal
239	EEP CS	O	E2 PROM CS
240	DVCC34	I	Voltage
241	FLASH CS	O	FLASH CE
242	SH WAKEUP	O	Rising Demand Signal
243	NC	-	NC
244	NC	-	NC

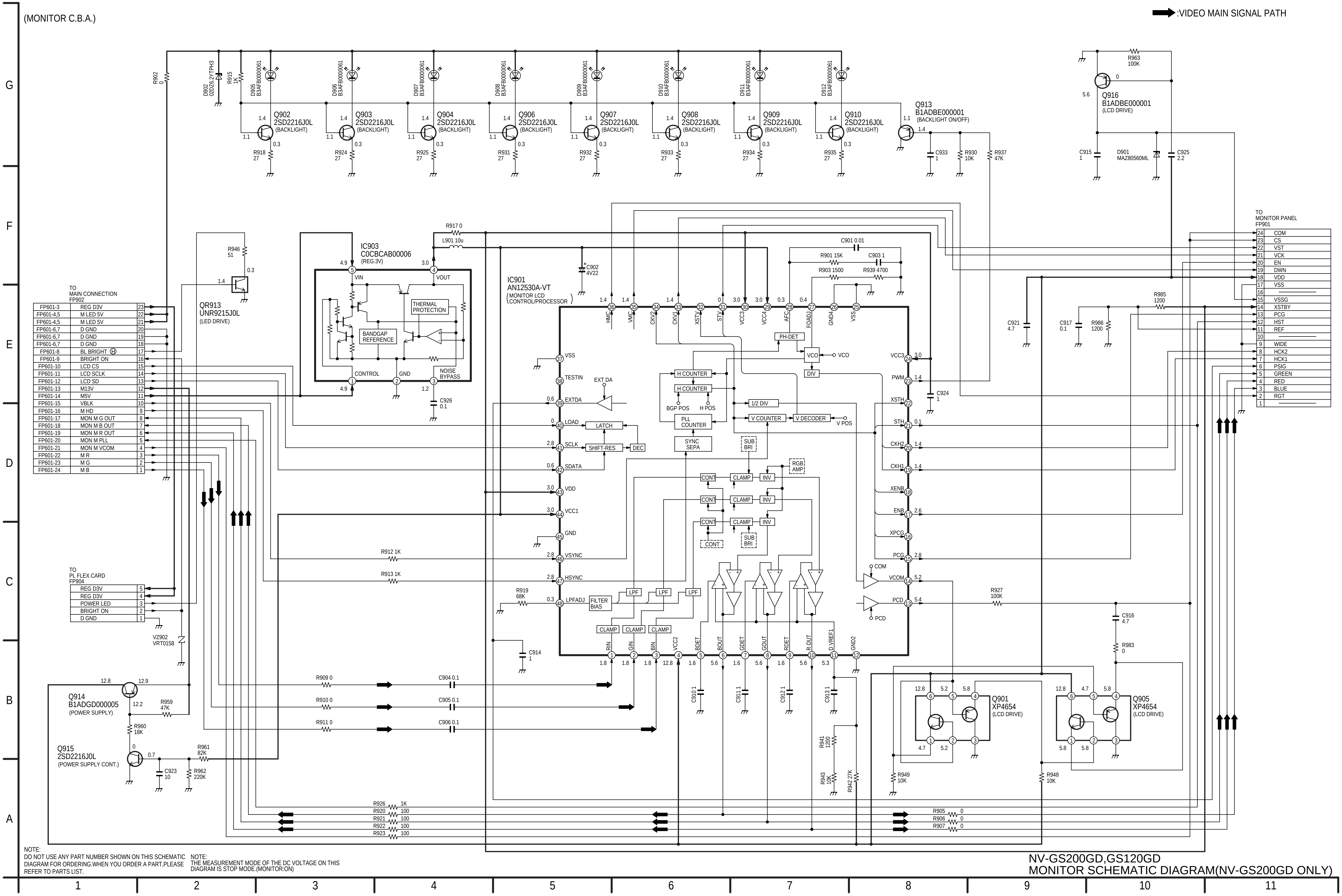
IC2001 : VTR CONTROL MICROCOMPUTER

Pin No.	Signal Name	I/O	Explanation
1	NC	-	NC
2	AVCC31	I	Voltage
3	AVSS	-	GND
4	DVCC2	I	Voltage
5	ENDIAN	I	Voltage
6	BOOT	I	BOOT
7	PCTS3	O	PCTS3(EVR2)
8	PCTS0	O	PCTS2(EVR2)
9	INTLV	I	Inter leave Mode
10	SDI DINT	I	SDI DINT(EVR2)
11	PCTS2	O	PCTS2(EVR2)
12	SDAO TPC	O	SDAO(EVR2)
13	BW0	I	Voltage
14	/DBGE	I	/DBGE(EVR2)
15	DCLK	O	DCLK(EVR2)
16	USB INT	I	Voltage
17	PCTS1	O	PCTS1(EVR2)
18	SYS RDY	-	NC
19	DVSS	-	GND
20	TEST1	-	GND
21	BUSMD	I	Voltage
22	/DRESET	I	/DRESET(EVR2)
23	TEST5	-	GND
24	RESET	I	System Reset
25	PLL ON	I	Voltage
26	FVCC2	I	Voltage
27	FVSS	-	GND
28	NMI	I	NMI
29	BW1	I	Voltage
30	DVCC2	I	Voltage
31	DVCC31	I	Voltage
32	NC	-	NC
33	SBA SIF CLK	O	Sub Audio Serial Clock
34	PHOTO2	I	Photo Input
35	NC	-	NC
36	SBA CS	O	Sub Audio Chip Select
37	VTR TEST L	I	VTR Test
38	SBA SIF DTI	I	Sub Audio Serial Deta Input
39	R PLUG L	I	Free Style Remote Control Input Detection
40	SBA SIF DTO	O	Sub Audio Serial Deta Output
41	EXT 5V SW	O	Power Supply Control
42	S PLUG	I	S-Jack Detection
43	DOOR OPEN	I	Door Open Sensor
44	SYNC DET	I	Sync Detection
45	FVCC3	I	Voltage
46	FVSS	-	GND
47	DVSS	-	GND
48	LCD RVS SW	I	LCD Panel Reversal Input
49	SIF P SAVE	O	SIF Power Save
50	BRIGHT ON	I	Backlight Input terminal
51	LCD OPEN SW	I	LCD Panel Open Input
52	AV PLUG	I	AV Jack Detection
53	USB DET	I	USB Cable Connection detection
54	BL BRIGHT Ⓗ	O	EVF Backright Output On:H
55	ARB	-	NC
56	SIF CS	O	SIF Serial CS
57	USB DP BIAS	O	Bias Addition Function
58	XRST	O	System Reset
59	NC	-	NC
60	SH COM TRG	I	Communication Start Signal
61	EVF HL	I	EVF Backlight Birth Determination
62	INPUT SEL	O	S/AV Input terminal Change
63	SHM BOOT REQ	O	ROM Data Download
64	AM SEND END	O	AM SEND END
65	NC	-	NC
66	NC	-	NC
67	MEMO END	I	Memory End
68	HOST REQ	I	Outside Camera Port Layout
69	EVF ON Ⓗ	O	EVF Power Control
70	DVCC32	I	Voltage
71	NC	-	NC
72	NC	-	NC
73	HOST ACK	O	Outside Camera Port Layout
74	NC	-	NC
75	VTR T	O	Communication Microcomputer Request
76	LCD CS	O	LCD Monitor IC CS
77	NC	-	NC
78	NC	-	NC
79	S PHOTO SW2	O	S-Sensor Output
80	T PHOTO SW1	O	T-Sensor Output
81	MIC CLK	O	MIC Communication
82	MIC DATA	I/O	MIC Communication
83	DVSS	-	GND
84	REMOCON	I	IR Remote control In
85	S PHOTO SW1	O	S-Sensor Output
86	PS Ⓛ	O	Power Save Terminal Control (Standby: L)
87	T PHOTO SW2	O	T-Sensor Output
88	CAM D3 OFF	O	Camera Power control
89	SS DET	O	Start/Stop Detect
90	QUIC ST	O	Quick Start
91	CAM0	O	VTR Data
92	NC	-	NC
93	LCD SCK	O	LCD Monitor Communication
94	ERF CLK	O	E2PROM/RTC Communication
95	ERF DO	O	E2PROM/RTC Communication
96	ERF DI	I	E2PROM/RTC Communication
97	CAM RST	O	Camera Reset
98	LCD DI	I	LCD Monitor Communication
99	SH COM CLK	O	MPEG Communication Serial Data Clock
100	DVCC2	I	Voltage
101	DBCC32	I	Voltage
102	LCD DO	O	LCD Monitor Communication
103	PC RST	I	RS232C Reset
104	SH COM DI	O	MPEG Serial Data Output
105	232C RXD	I	UART1
106	232C TXD	O	UART0
107	SH COM DO	I	Serial Data Input
108	CPU VCC SW	O	Microcomputer Power Supply Change
109	V C DATA	O	VTR Serial Data Output
110	WINC END	I	WINC END
111	C V DATA	I	VTR Serial Data Input
112	MIC ON	O	MICPower Supply:L
113	REC REV	I	REC REV
114	RTC CS	O	clock CS
115	SNS LED	O	LED Illumination:H
116	CAM SCK	O	VTR Serial Clock
117	DVSS	-	GND
118	OSD SCK	O	OSD Communication Serial Clock
119	OSD SCK DO	O	OSD Communication Serial Data
120	SH SLEEP	I	SLEEPCondition determination
121	SS SW	I	Start/Stop Key Input
122	POWER ON	O	Power On:H

IC305 : CAMERA MICROCOMPUTER

Pin No.	Signal Name	I/O	Explanation
1	VDD B	I	Votage
2	SENS SW	-	NC
3	CAM SCLK	I	Camera Serial Clock
4	VSS	-	GND
5	ND PWM B	O	ND Filter Drive
6	VDD	I	Votage
7	OSC OUT	-	NC
8	AD VREF	I	Votage
9	XT2	-	NC
10	NC	-	NC
11	C V DATA	O	Camera Serial Data Out
12	V C DATA	I	Camera Serial Data In
13	CAM RTN	I	Camera Clock Deference Signal
14	OSC IN	I	13.5MHz In
15	VSS	-	GND
16	RESET	I	Reset
17	NC	-	PULL DOWN
18	VSS BU	-	GND
19	VDD BU	I	Voltage
20	MF LED	O	LED Drive
21	RTN FLD	I	Field Detect
22	OIS DA SCK	O	OIS DAC Clock
23	NC	-	NC
24	CAM SEND END	I	CAM SEND END
25	CHA END	I	Flash Charge End
26	SHOE SDO	O	SHOE Serial Data Out
27	OIS DA SDO	O	OIS DAC Data Out
28	OIS DA LD	-	NC
29	NC	-	NC
30	FCP CNT	O	Power Supply Control
31	MEGA REQUEST	I	Mega Pixel Request
32	CG SO	O	Character Gneration Serial Data
33	CG CLK	O	Character Gneration Serial Clock
34	BST	I	Boundary Scan Test SW
35	SHOE SDI	I	SHOE Serial Data In
36	E VDD	I	Voltage
37	E2 CS	O	EEPROM Chip Select
38	NC	-	NC
39	RW SEL	O	Read/Write Select
40	SHOE SCK	O	SHOE Serial Clock
41	E VSS	-	GND
42	E2 RST	O	EEPROM Reset
43	LED CONT	O	LED Drive
44	E2 RB	O	EEPROM Ready/Busy
45	LSTBY	O	Standby
46	CG CS	O	Character Gneration Chip Select
47	ASP1 CS	O	ASP1 Chip Select
48	LEN CS	O	Lens Chip Select
49	MEMO END	O	Memory End
50	ASP2 CS	O	ASP2 Chip Select
51	ASP3 CS	O	ASP3 Chip Select
52	SS DET	I	Start/Stop Detect
53	SHOE ON Ⓗ	O	SHOE Power ON/OFF
54	F OPEN	I	Flash Open
55	RE Ⓗ	O	Read Enable ON/OFF
56	WE Ⓛ	O	Write Enable ON/OFF
57	FUP Ⓗ	-	NC
58	DAS	O	Address Strobe
59	WINK END	O	WINK END
60	Z ABS	I	Zoom Encoder
61	MADO	I/O	Address Data
62	NC	-	NC
63	FLMD1/MAD5	I/O	Address Data
64	MAD1	I/O	Address Data
65	MAD2	I/O	Address Data
66	MAD8	I/O	Address Data
67	E VSS	-	GND
68	MAD4	I/O	Address Data
69	MAD11	I/O	Address Data
70	MAD3	I/O	Address Data
71	MAD7	I/O	Address Data
72	MAD6	I/O	Address Data
73	MAD14	I/O	Address Data
74	FLMD0	I	Flash Writing Data
75	MAD9	I/O	Address Data
76	E VDD	I	Voltage
77	MAD10	I/O	Address Data
78	MAD12	I/O	Address Data
79	MAD13	I/O	Address Data
80	MAD15	I/O	Address Data
81	CAM0	I	CAM Microcomputer Communication
82	IND SDI	I	EEPROM Serial Data In
83	IND SDO	O	EEPROM Serial Data Out
84	INST ST	I	REC ontrol
85	IND SCK	O	EEPROM Serial Clock
86	MF RING2	I	MF Ring 2
87	AFST	O	Process Timing Pulse
88	VTR T	O	Sync Serial Communication Enable
89	EVR SBI	I	EVR Serial Data In
90	CAM T	I	Camera Test
91	EVR SBO	O	EVR Serial Data Out
92	MVD	I	VD From DSP LSI
93	TRIG END	O	Flash Trigger End
94	EVR SCK	I	EVR Serial Clock
95	FLSDLY	I	Flashing Delay
96	BEND	I	Data Block End Request
97	NC	-	NC
98	A COMP	I	Linear Adjust (A COMP Capture)
99	NC	-	GND
100	B COMP	I	Linear Adjust (B COMP Capture)
101	V1V2	I	Act Detect End
102	CHARGE	O	Flash Charge
103	GYROX	-	GND
104	ND OPEN	I	ND Open
105	MF RING1	I	MF Ring 1
106	SHOE DET	I	SHOE Detect
107	NC	-	GND
108	ZM B	-	GND
109	ZM A	-	GND
110	FM B	I	Auto Forcus FG B Monitor
111	FM A	I	Auto Forcus FG A Monitor
112	XPOS	-	GND
113	YPOS	-	GND
114	ND FNO	I	ND F Value
115	FNO	I	F Value
116	M REF	I	Voltage
117	GYROY	-	GND
118	Z AD	I	Zoom Adjustment
119	AD VREF	I	Voltage
120	IR	I	IR Sensor

(MONITOR C.B.A.)



:VIDEO MAIN SIGNAL PATH
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
R902 0
D902 02DZ6.2YTPH3
R915 1K
D905 B3AFB0000061
D906 B3AFB0000061
D907 B3AFB0000061
D908 B3AFB0000061
D909 B3AFB0000061
D910 B3AFB0000061
D911 B3AFB0000061
D912 B3AFB0000061
Q902 2SD2216J0L (BACKLIGHT)
Q903 2SD2216J0L (BACKLIGHT)
Q904 2SD2216J0L (BACKLIGHT)
Q906 2SD2216J0L (BACKLIGHT)
Q907 2SD2216J0L (BACKLIGHT)
Q908 2SD2216J0L (BACKLIGHT)
Q909 2SD2216J0L (BACKLIGHT)
Q910 2SD2216J0L (BACKLIGHT)
R918 27
R924 27
R925 27
R931 27
R932 27
R933 27
R934 27
R935 27
Q913 B1ADBE000001 (BACKLIGHT ON/OFF)
C933 1
R930 10K
R937 47K
R963 100K
Q916 B1ADBE000001 (LCD DRIVE)
C915 1
D901 MAZ80560ML
C925 2.2
TO MAIN CONNECTION FP902
FP601-3 REG D3V 23
FP601-4,5 M LED 5V 22
FP601-4,5 M LED 5V 21
FP601-6,7 D GND 20
FP601-6,7 D GND 19
FP601-6,7 D GND 18
FP601-8 BL BRIGHT Ⓗ 17
FP601-9 BRIGHT ON 16
FP601-10 LCD CS 15
FP601-11 LCD SCLK 14
FP601-12 LCD SD 13
FP601-13 M13V 12
FP601-14 M5V 11
FP601-15 VBLK 10
FP601-16 M HD 9
FP601-17 MON M G OUT 8
FP601-18 MON M B OUT 7
FP601-19 MON M R OUT 6
FP601-20 MON M PLL 5
FP601-21 MON M VCOM 4
FP601-22 M R 3
FP601-23 M G 2
FP601-24 M B 1
R946 51
QR913 UNR9215J0L (LED DRIVE)
IC903 C0CBCAB00006 (REG.3V)
VIN
VOUT
THERMAL PROTECTION
BANDGAP REFERENCE
CONTROL
GND
NOISE BYPASS
C926 0.1
R917 0
L901 10u
C902 4V22
IC901 AN12530A-VT (MONITOR LCD CONTROL/PROCESSOR)
HMC
VMC
CKV2
CKV1
XSTV
STV
VCC3
VCC4
AFC
FOADJ
GND4
VSS
PH-DET
VCO
DIV
H COUNTER
H COUNTER
BGP POS
H POS
1/2 DIV
PLL COUNTER
V COUNTER
V DECODER
V POS
SYNC SEPA
SUB BRI
RGB AMP
CONT
CLAMP
INV
LATCH
SHIFT-RES
DEC
EXT DA
FILTER BIAS
LPF
VSS
TESTIN
EXTDA
LOAD
SCLK
SDATA
VDD
VCC1
GND
VSYNC
HSYNC
LPFADJ
RIN
GIN
BIN
VCC2
BDET
BOUT
GDET
GOUT
RDET
R OUT
D VREF1
GND2
VCC3
PWM
XSTH
STH
CKH2
CKH1
XENB
ENB
XPCG
PCG
VCOM
PCD
COM
C901 0.01
R901 15K
C903 1
R903 1500
R939 4700
C924 1
R912 1K
R913 1K
R919 68K
C914 1
TO PL FLEX.CARD FP904
REG D3V 5
REG D3V 4
POWER LED 3
BRIGHT ON 2
D GND 1
VZ902 VRT0158
Q914 B1ADGD000005 (POWER SUPPLY)
R959 47K
R960 18K
Q915 2SD2216J0L (POWER SUPPLY CONT.)
C923 10
R961 82K
R962 220K
R909 0
R910 0
R911 0
C904 0.1
C905 0.1
C906 0.1
C910 1
C911 1
C912 1
C913 1
R941 1200
R943 10K
R942 27K
R926 1K
R920 100
R921 100
R922 100
R923 100
R905 0
R906 0
R907 0
R949 10K
R948 10K
Q901 XP4654 (LCD DRIVE)
Q905 XP4654 (LCD DRIVE)
R927 100K
C916 4.7
R983 0
C921 4.7
C917 0.1
R986 1200
R985 1200
TO MONITOR PANEL FP901
24 COM
23 CS
22 VST
21 VCK
20 EN
19 DWN
18 VDD
17 VSS
16
15 VSSG
14 XSTBY
13 PCG
12 HST
11 REF
10
9 WIDE
8 HCK2
7 HCK1
6 PSIG
5 GREEN
4 RED
3 BLUE
2 RGT
1

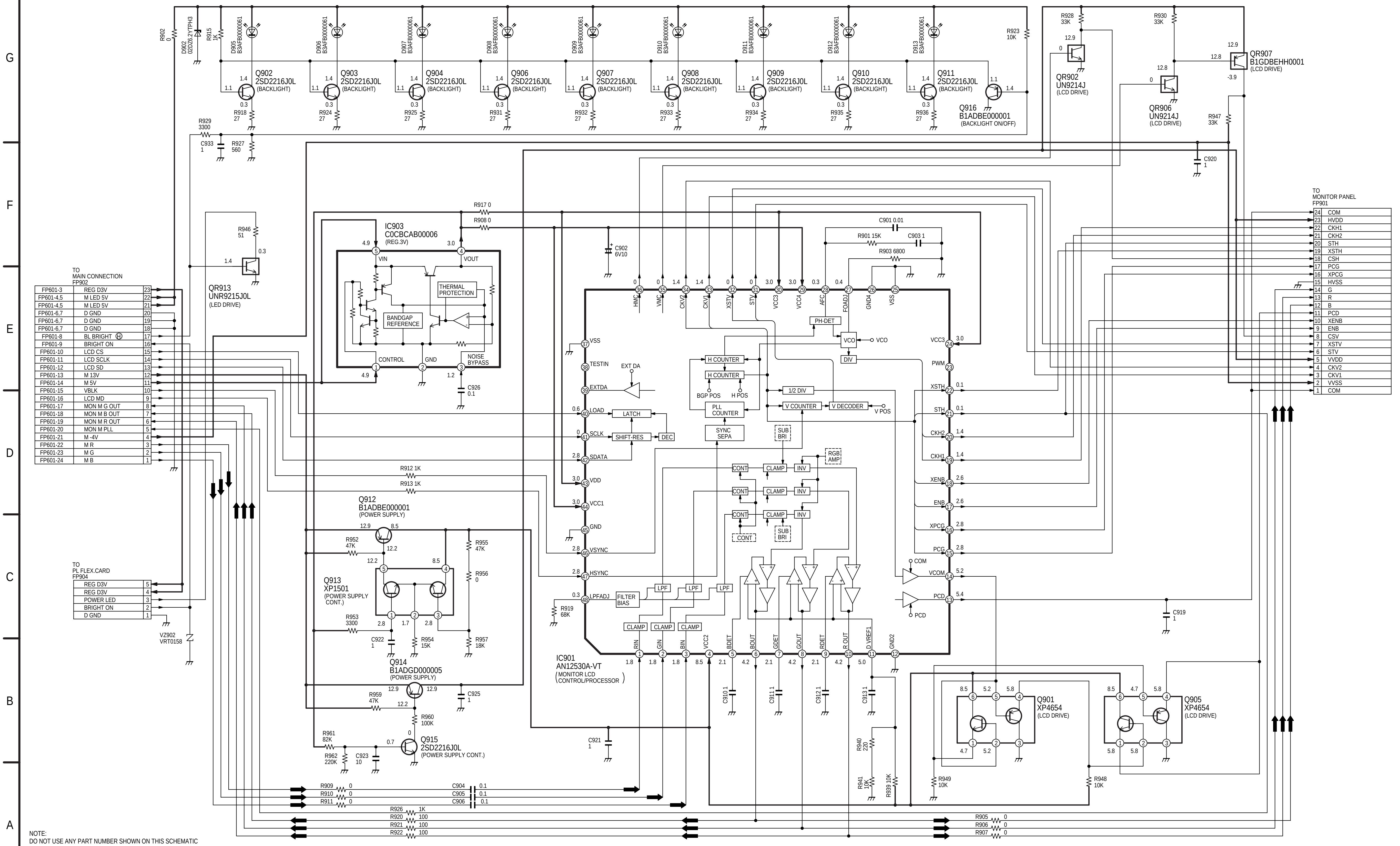
NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.(MONITOR:ON)

NV-GS200GD,GS120GD
MONITOR SCHEMATIC DIAGRAM(NV-GS200GD ONLY)

(MONITOR C.B.A.)

:VIDEO MAIN SIGNAL PATH



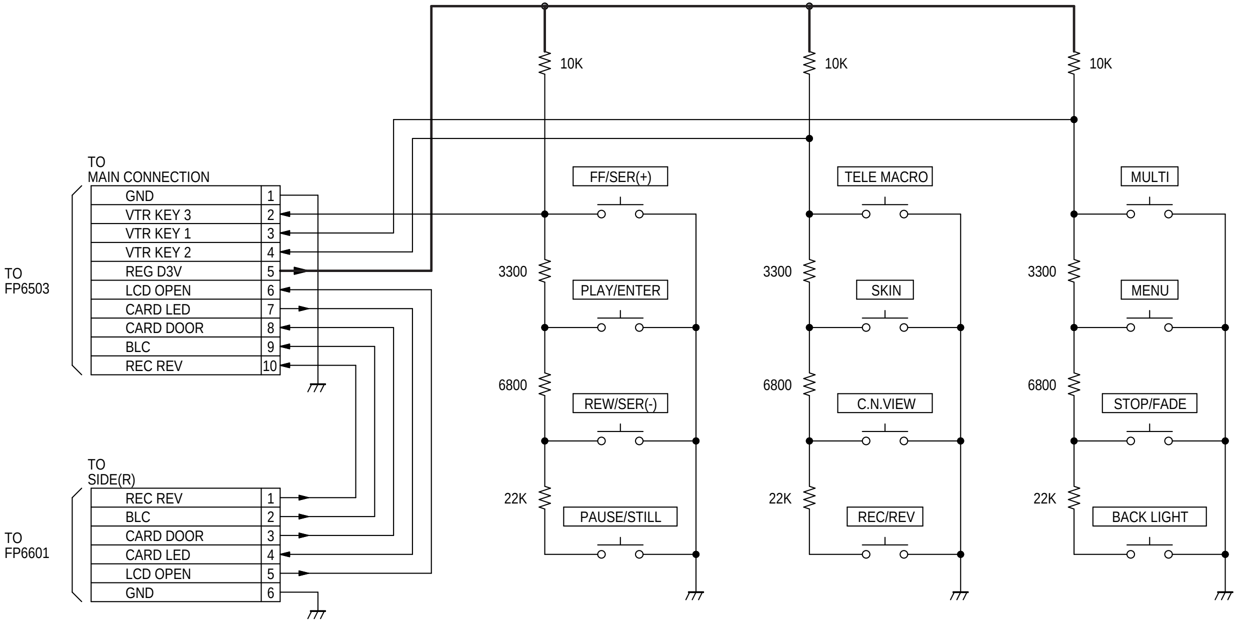
D905 B3AFB0000061
D906 B3AFB0000061
D907 B3AFB0000061
D908 B3AFB0000061
D909 B3AFB0000061
D910 B3AFB0000061
D911 B3AFB0000061
D912 B3AFB0000061
D913 B3AFB0000061
R902 0
D902 02DZ6.2Y(TPH3
R915 1K
Q902 2SD2216J0L (BACKLIGHT)
Q903 2SD2216J0L (BACKLIGHT)
Q904 2SD2216J0L (BACKLIGHT)
Q906 2SD2216J0L (BACKLIGHT)
Q907 2SD2216J0L (BACKLIGHT)
Q908 2SD2216J0L (BACKLIGHT)
Q909 2SD2216J0L (BACKLIGHT)
Q910 2SD2216J0L (BACKLIGHT)
Q911 2SD2216J0L (BACKLIGHT)
Q916 B1ADBE000001 (BACKLIGHT ON/OFF)
R923 10K
R918 27
R924 27
R925 27
R931 27
R932 27
R933 27
R934 27
R935 27
R936 27
R929 3300
C933 1
R927 560
R928 33K
R930 33K
QR902 UN9214J (LCD DRIVE)
QR906 UN9214J (LCD DRIVE)
QR907 B1GDBEHH0001 (LCD DRIVE)
R947 33K
C920 1
R946 51
QR913 UNR9215J0L (LED DRIVE)
IC903 C0CBCAB00006 (REG.3V)
VIN
VOUT
THERMAL PROTECTION
BANDGAP REFERENCE
CONTROL
GND
NOISE BYPASS
C926 0.1
R917 0
R908 0
C902 6V10
C901 0.01
R901 15K
C903 1
R903 6800
TO MAIN CONNECTION FP902
FP601-3 REG D3V 23
FP601-4,5 M LED 5V 22
FP601-4,5 M LED 5V 21
FP601-6,7 D GND 20
FP601-6,7 D GND 19
FP601-6,7 D GND 18
FP601-8 BL BRIGHT Ⓗ 17
FP601-9 BRIGHT ON 16
FP601-10 LCD CS 15
FP601-11 LCD SCLK 14
FP601-12 LCD SD 13
FP601-13 M 13V 12
FP601-14 M 5V 11
FP601-15 VBLK 10
FP601-16 LCD MD 9
FP601-17 MON M G OUT 8
FP601-18 MON M B OUT 7
FP601-19 MON M R OUT 6
FP601-20 MON M PLL 5
FP601-21 M -4V 4
FP601-22 M R 3
FP601-23 M G 2
FP601-24 M B 1
TO PL FLEX.CARD FP904
REG D3V 5
REG D3V 4
POWER LED 3
BRIGHT ON 2
D GND 1
VZ902 VRT0158
R912 1K
R913 1K
Q912 B1ADBE000001 (POWER SUPPLY)
R952 47K
R955 47K
R956 0
Q913 XP1501 (POWER SUPPLY CONT.)
R953 3300
C922 1
R954 15K
R957 18K
Q914 B1ADGD000005 (POWER SUPPLY)
R959 47K
C925 1
R960 100K
R961 82K
R962 220K
C923 10
Q915 2SD2216J0L (POWER SUPPLY CONT.)
IC901 AN12530A-VT (MONITOR LCD CONTROL/PROCESSOR)
HMC VMC CKV2 CKV1 XSTV STV VCC3 VCC4 AFC FOADJ GND4 VSS
VSS TESTIN EXTDA LOAD SCLK SDATA VDD VCC1 GND VSYNC HSYNC LPFADJ
VCC3 PWM XSTH STH CKH2 CKH1 XENB ENB XPCG PCG VCOM PCD
RIN GIN BIN VCC2 BDET BOUT GDET GOUT RDET R OUT D VREF1 GND2
EXT DA
LATCH
SHIFT-RES
DEC
H COUNTER
H COUNTER
BGP POS
H POS
PLL COUNTER
SYNC SEPA
1/2 DIV
V COUNTER
V DECODER
V POS
PH-DET
VCO
DIV
SUB BRI
RGB AMP
CONT
CLAMP
INV
FILTER BIAS
LPF
COM
R919 68K
C919 1
C910 1
C911 1
C912 1
C913 1
R940 220
R941 10K
R939 10K
R949 10K
R948 10K
C921 1
Q901 XP4654 (LCD DRIVE)
Q905 XP4654 (LCD DRIVE)
TO MONITOR PANEL FP901
24 COM
23 HVDD
22 CKH1
21 CKH2
20 STH
19 XSTH
18 CSH
17 PCG
16 XPCG
15 HVSS
14 G
13 R
12 B
11 PCD
10 XENB
9 ENB
8 CSV
7 XSTV
6 STV
5 VVDD
4 CKV2
3 CKV1
2 VVSS
1 COM
R909 0
R910 0
R911 0
C904 0.1
C905 0.1
C906 0.1
R926 1K
R920 100
R921 100
R922 100
R905 0
R906 0
R907 0
G F E D C B A
1 2 3 4 5 6 7 8 9 10 11

NOTE:
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NOTE:
THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.(MONITOR:ON)

NV-GS200GD,GS120GD
MONITOR SCHEMATIC DIAGRAM
(NV-GS120GD ONLY)

(SIDE R VTR OPEATION FLEX.UNIT)


TO
MAIN CONNECTION
TO
FP6503
GND 1
VTR KEY 3 2
VTR KEY 1 3
VTR KEY 2 4
REG D3V 5
LCD OPEN 6
CARD LED 7
CARD DOOR 8
BLC 9
REC REV 10
TO
SIDE(R)
TO
FP6601
REC REV 1
BLC 2
CARD DOOR 3
CARD LED 4
LCD OPEN 5
GND 6
10K
10K
10K
3300
3300
3300
6800
6800
6800
22K
22K
22K
FF/SER(+)
PLAY/ENTER
REW/SER(-)
PAUSE/STILL
TELE MACRO
SKIN
C.N.VIEW
REC/REV
MULTI
MENU
STOP/FADE
BACK LIGHT

NV-GS200GD,GS120GD
SIDE (R) VTR OPERATION FLEX.
UNIT SCHEMATIC DIAGRAM

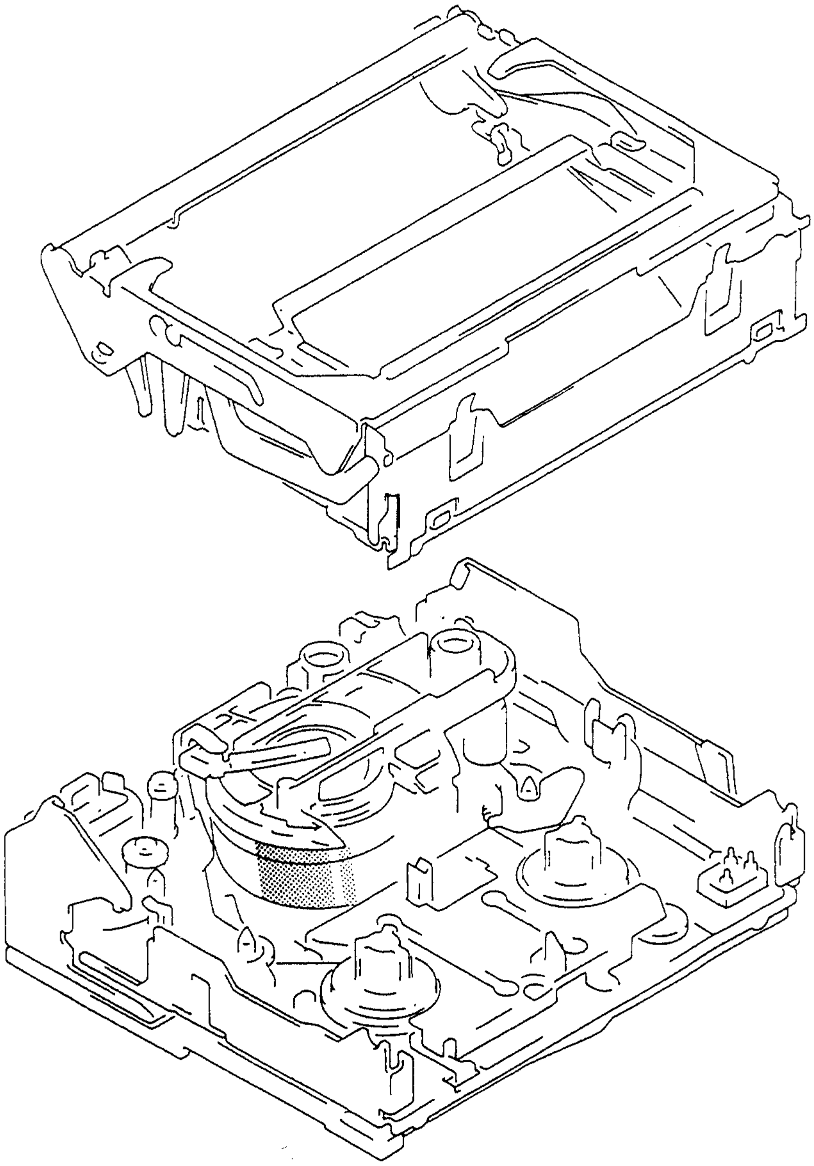
8 mm Video MECHANICAL ADJUSTMENT MANUAL IV

V12995

A MECHANISM

Video 8

File with the SERVICE MANUAL



8 VIDEO RECORDER

SONY

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1. PREPARATION FOR MECHANICAL CHECK, ADJUSTMENT AND REPLACEMENT

For removal of the cabinet and boards, refer to "Disassembly" in each Service Manual.
Mechanical adjustment is done in the $\boxed{\text{USE}}$ mode. (To select the $\boxed{\text{USE}}$ mode, refer to "1-3, Handling of Mode Selector".)

1-1. CASSETTE COMPARTMENT ASSEMBLY

1. Removal (Fig. 1)

1) Select the $\boxed{\text{USE}}$ mode.
2) Push the part ⓐ of lock arm ❶ toward the arrow 🅐 to unlock from lock guide ❷, and raise the cassette compartment as shown in Fig. a.
3) Remove two screws ❸ and remove the LS frame ❹ toward the arrow 🅑.
4) With the cassette compartment assembly ❺ pushed in arrow 🅒 direction, distort tabs ⓑ and ⓒ of MD side plate toward the arrow 🅓 to disengage from catches ⓓ and ⓔ of cassette compartment assembly respectively.
   In such a case, insert a screwdriver between MD side plate and catch and disengage the tab ⓑ first, then disengage the tab ⓒ for easy removal as shown in Fig. b.
5) Raise the cassette compartment assembly ❺ in the opposite direction of arrow 🅒 until the shafts ⓕ and ⓖ are disengaged, and push left and right side plates toward arrow 🅓 to remove the cassette compartment assembly.

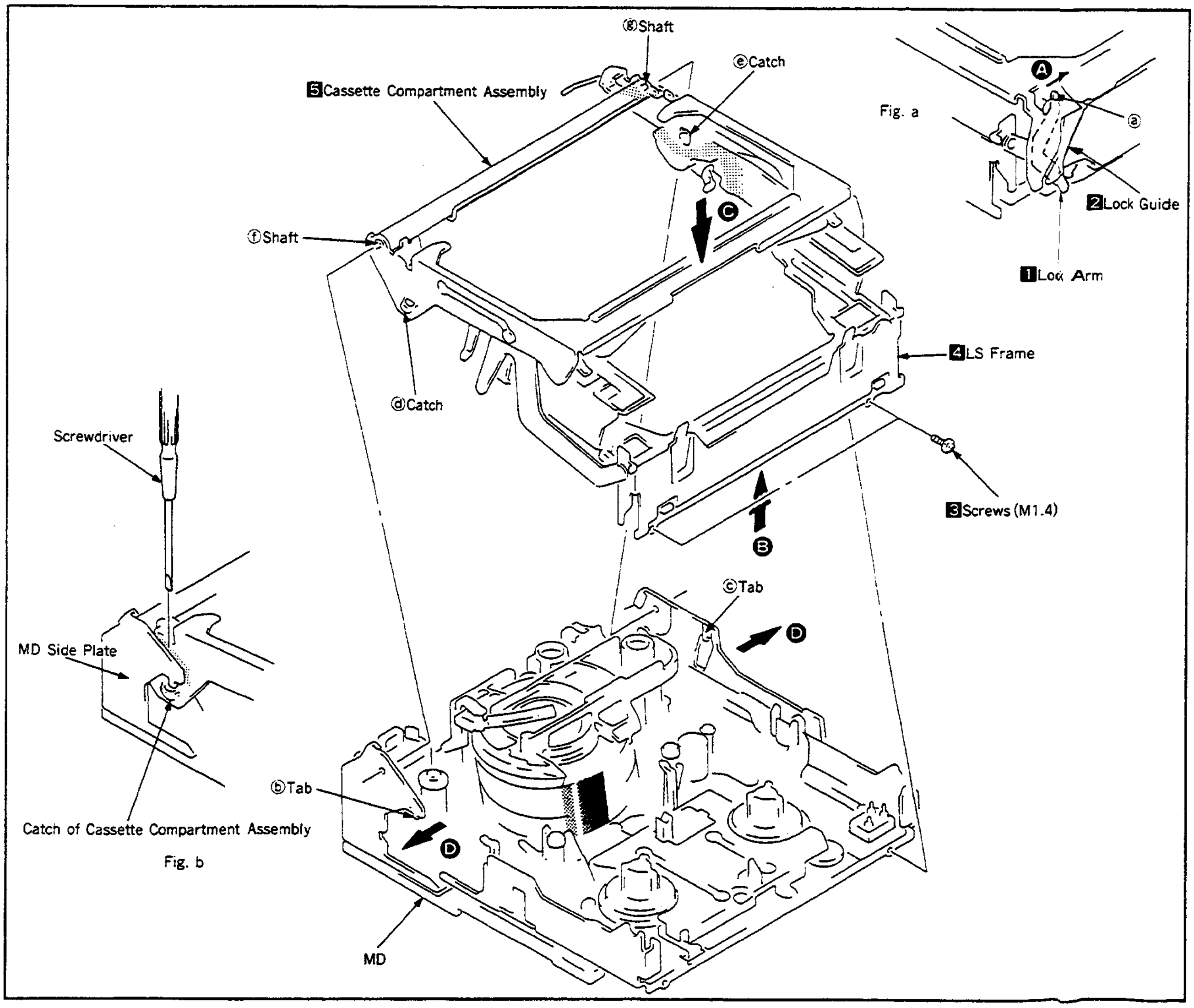

ⓖShaft
ⓔCatch
❺Cassette Compartment Assembly
Fig. a
🅐
ⓐ
❷Lock Guide
❶Lock Arm
ⓕShaft
🅒
❹LS Frame
ⓓCatch
Screwdriver
❸Screws (M1.4)
🅑
ⓒTab
🅓
MD Side Plate
ⓑTab
Catch of Cassette Compartment Assembly
Fig. b
🅓
MD

Fig. 1

2. Mounting (Fig. 2)

1) Select the USE mode.
2) Draw the cassette holder ❻ of cassette compartment assembly ❺ toward the arrow Ⓔ, and lower the LS frame ❹ toward the arrow Ⓕ.
3) With the cassette compartment assembly ❺ tilted by about 45° against MD, insert shafts ⓕ and ⓖ of cassette compartment assembly into holes ⓗ and ⓘ of MD side plate respectively.
   At this time, the part ⓙ of torsion bar must be positioned on the side ⓚ of LS flexible board (FP-443) (not on the side ⓛ), as shown in Fig. c.
4) Holding holes ⓗ and ⓘ of MD side plate, press the cassette compartment assembly ❺ so that its catches ⓓ and ⓔ are engaged with tabs ⓑ and ⓒ of MD side plate. In such a case, the lock arm ❶ of cassette compartment assembly must be inserted into a groove in the guide rail ❼ on the MD side plate as shown in Fig. d.
5) Insert left and right side plates ⓜ and ⓝ of LS frame ❹ inside the LS chassis ❽.
6) Push down the cassette compartment to lock.

Note : Make sure that the shafts ⓕ, ⓖ and the tabs ⓞ, ⓟ are set in the MD side plate properly.

7) Tighten two screws ❸.

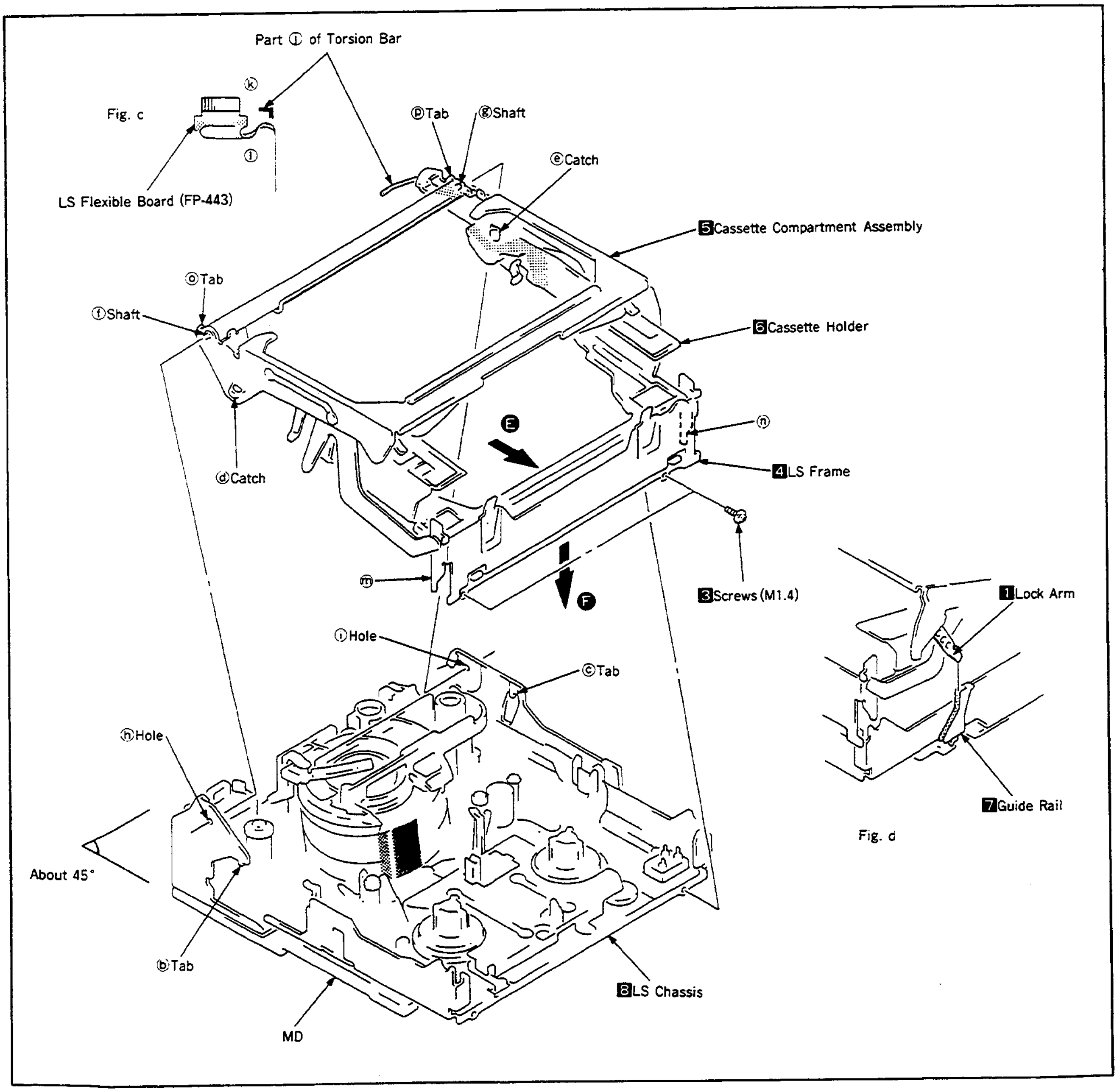

Part ⓙ of Torsion Bar
Fig. c
ⓚ
ⓛ
LS Flexible Board (FP-443)
ⓟTab
ⓖShaft
ⓔCatch
❺Cassette Compartment Assembly
ⓞTab
ⓕShaft
❻Cassette Holder
ⓝ
Ⓔ
❹LS Frame
ⓓCatch
ⓜ
Ⓕ
❸Screws (M1.4)
❶Lock Arm
ⓘHole
ⓒTab
ⓗHole
❼Guide Rail
Fig. d
About 45°
ⓑTab
❽LS Chassis
MD

Fig. 2

1-2. OPERATION WITH CASSETTE COMPARTMENT ASSEMBLY REMOVED (Fig. 3)

1) Referring to the Service Manual, supply power with the cabinet and camera removed. (Make the mechanical deck ready to operate.)
2) Place the cap 2 on the Reflector C 1.
3) Press the pin of the push switch 3 (ON state) and fix it with adhesive tape 4 in that state.

Note : Press the asterisked (＊) pin to set the REC mode.
(This is not required for the other modes.)

4) Push the cassette compartment DOWN switch 5 in an arrow direction as shown in Fig. a.

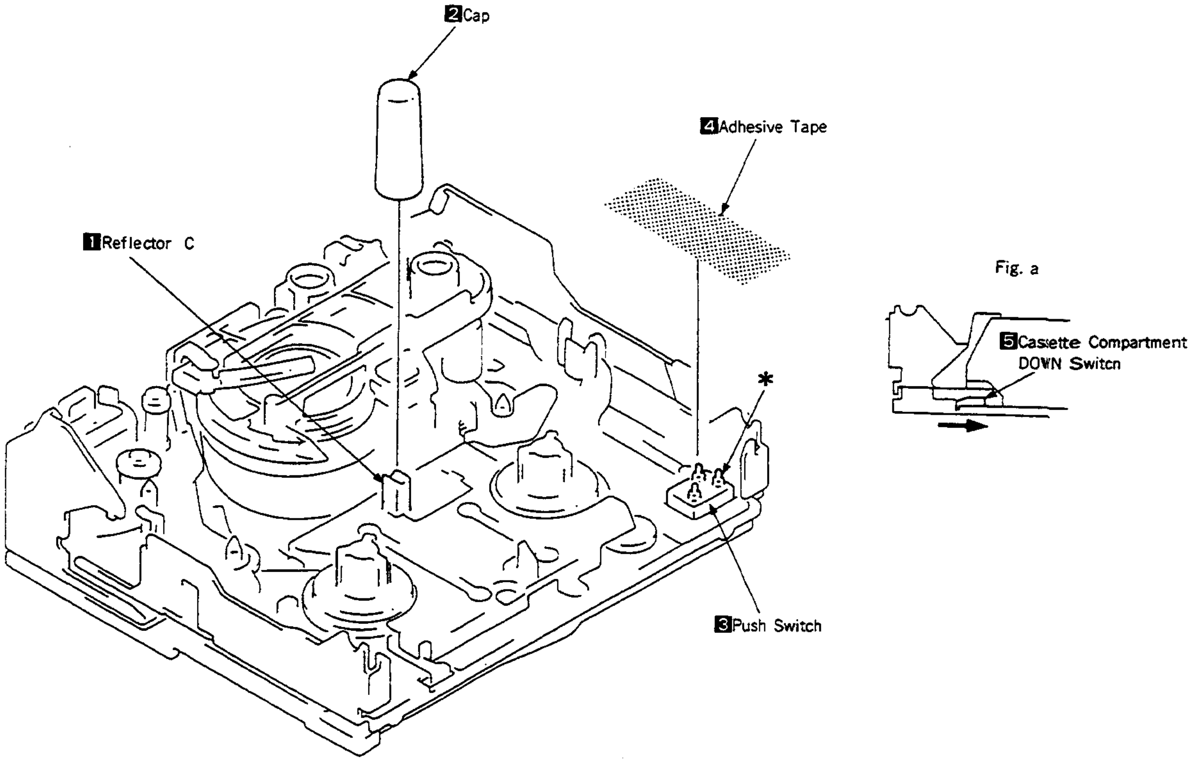

2 Cap
4 Adhesive Tape
1 Reflector C
Fig. a
5 Cassette Compartment DOWN Switcn
＊
3 Push Switch

Fig. 3

1-3. HANDLING OF MODE SELECTOR

- Stick the MD process table label to the mode selector IV panel, then mount the panel on the mode selector.
  U,U', FL, O, O' and A mechanisms have different mode indications respectively. Select your disired type. (Fig.4)

1 Construction (Fig.5)

2 Connection (Fig.6)

For CCD-FX410 series

1) Insert the FP-425 flexible connector **1** and M-SW connector **2** into the mode selector IV conversion connector **3** respectively.

3. Handling

1) Use the M mode selector buttons only.
2) During mode selection, "BLANK" lights up when no mode is being selected.
3) If the right M mode selector button is kept pressed, END, EJECT, USE, LOAD, READY,TURN, REC and FF light up in that order.
4) When changing over from the FF mode back to the END mode, press the left M mode selector botton to select your desired mode.

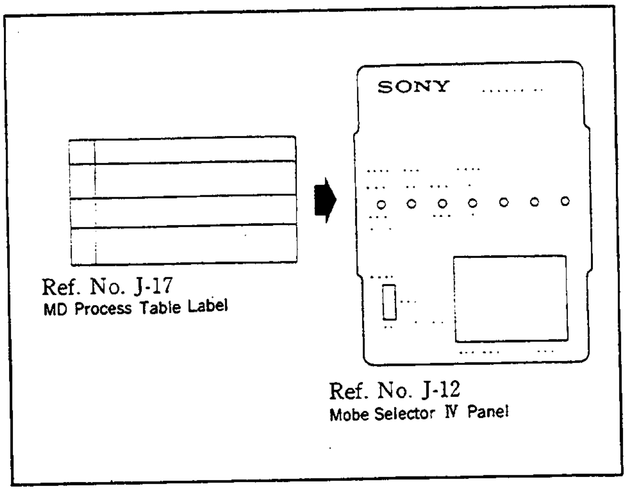

SONY
Ref. No. J-17
MD Process Table Label
Ref. No. J-12
Mobe Selector Ⅳ Panel

Fig. 4

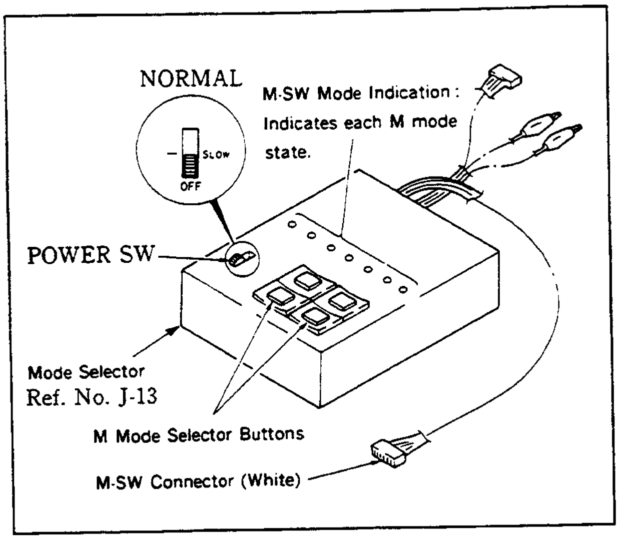

NORMAL
SLOW
OFF
M-SW Mode Indication : Indicates each M mode state.
POWER SW
Mode Selector
Ref. No. J-13
M Mode Selector Buttons
M-SW Connector (White)

Fig. 5

For CCD-FX410 series

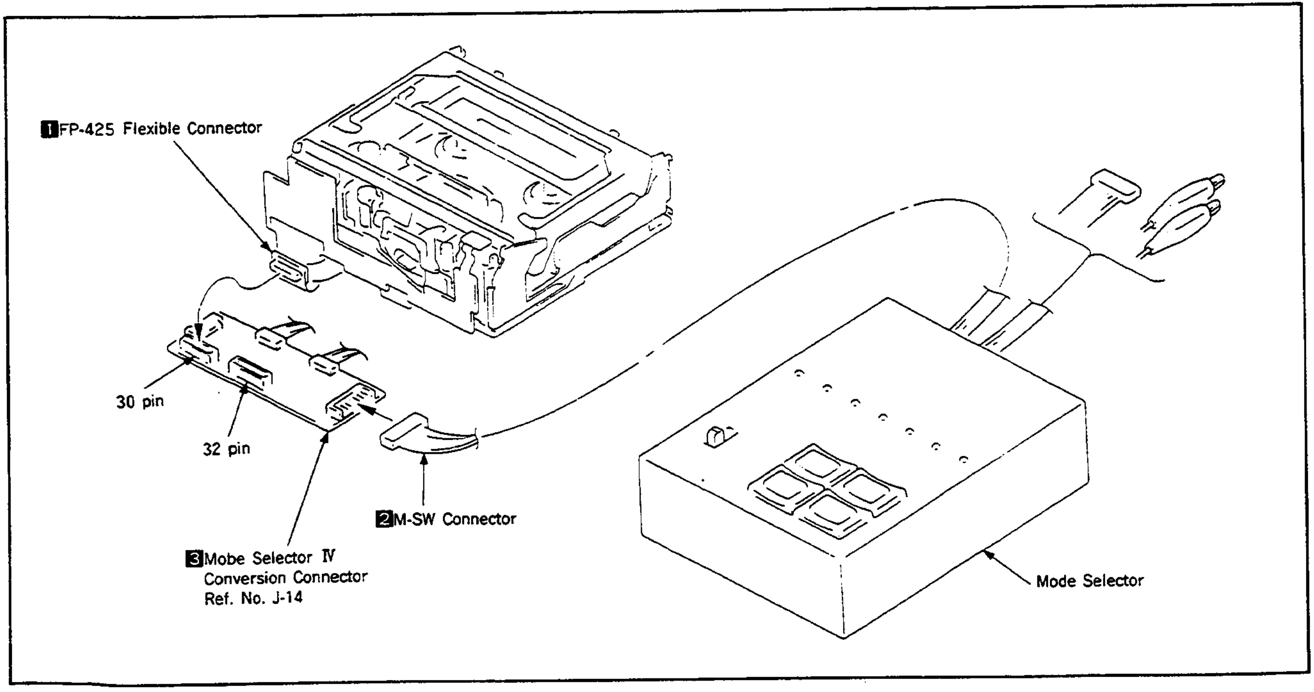
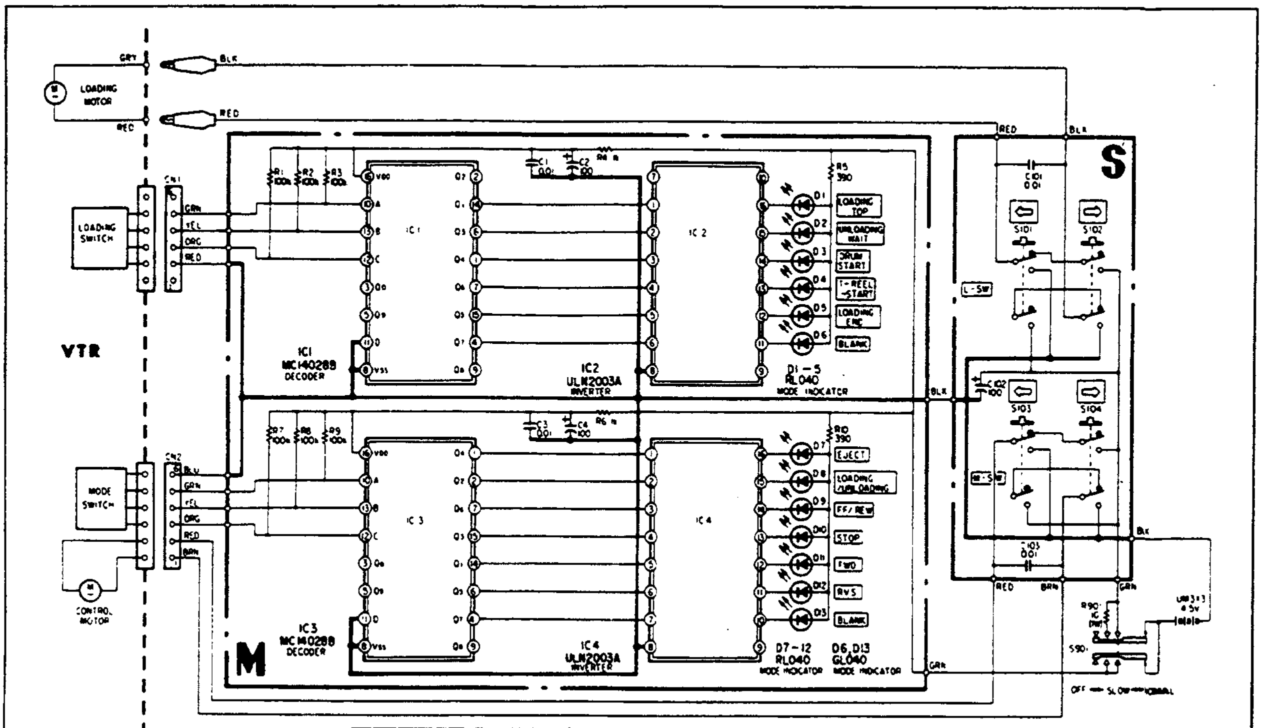

1 FP-425 Flexible Connector
30 pin
32 pin
2 M-SW Connector
3 Mobe Selector Ⅳ Conversion Connector Ref. No. J-14
Mode Selector

Fig. 6

1-4. MODE SELECTOR SCHEMATIC DIAGRAM


GRY
BLK
LOADING MOTOR
RED
CN1
LOADING SWITCH
GRN
YEL
ORG
RED
VTR
CN2
BLU
MODE SWITCH
BRN
CONTROL MOTOR
IC1 MC14028B DECODER
IC2 ULN2003A INVERTER
IC3 MC14028B DECODER
IC4 ULN2003A INVERTER
C1 .001
C2 100
C3 .001
C4 100
R1 100k
R2 100k
R3 100k
R4 1k
R5 390
R6 1k
R7 100k
R8 100k
R9 100k
R10 390
LOADING TOP
UNLOADING WAIT
DRUM START
T-REEL START
LOADING END
BLANK
D1-5 RL040 MODE INDICATOR
EJECT
LOADING /UNLOADING
FF/REW
STOP
FWD
RVS
BLANK
D7-12 RL040 MODE INDICATOR
D6, D13 GL040 MODE INDICATOR
S
S101
S102
S103
S104
C101 .001
C102 100
C103 .001
L-SW
M-SW
R901
S901
M
UM3×3 4.5V
OFF — SLOW — NORMAL

M-Sw (IC 3)

DECODER INPUT C	B	A	MODE	LED NO
0	0	0		
0	0	1	FWD	D11
0	1	0	LOADING/UNLOADING	D8
0	1	1	STOP	D10
1	0	0	EJECT	D7
1	0	1	RVS	D12
1	1	0	FF/REW	D9
1	1	1	BLANK	D13

0: INPUT LEVEL L
1: INPUT LEVEL H

L-Sw (IC 1)

DECODER INPUT C	B	A	MODE	LED NO
0	0	0		
0	0	1	LOADING TOP	D1
0	1	0		
0	1	1	LOADING END	D5
1	0	0	DRUM START	D3
1	0	1	UNLOADING WAIT	D2
1	1	0	T-REEL-START	D4
1	1	1	BLANK	D6

SWITCH ⇦	⇨	DIRECTION OF MOTOR REVOLUTION
OFF	OFF	STOP
ON	OFF	⇦
OFF	ON	⇨

⇦ L-Sw LOADING END → LOADING TOP
M-Sw RVS → EJECT

⇨ L-Sw LOADING TOP → LOADING END
M-Sw EJECT → RVS

1-5. MODE SELECTOR PARTS LIST

Ref. No	Part No.	Description		
		CAPACITOR		
C1	1-108-579-00	MILER	0.01μF	50V
C2	1-123-333-00	ELECT	100μF	24V
C3	1-108-579-00	MILER	0.01μF	50V
C4	1-123-333-00	ELECT	100μF	24V
C101	1-108-579-00	MILER	0.01μF	50V
C102	1-123-333-00	ELECT	100μF	24V
C103	1-108-579-00	MILER	0.01μF	50V
		DIODE		
D1	8-719-812-31	DIODE TLR123		
D2	8-719-812-31	DIODE TLR123		
D3	8-719-812-31	DIODE TLR123		
D4	8-719-812-31	DIODE TLR123		
D5	8-719-812-31	DIODE TLR123		
D6	8-719-812-33	DIODE TLG123A		
D7	8-719-812-31	DIODE TLR123		
D8	8-719-812-31	DIODE TLR123		
D9	8-719-812-31	DIODE TLR123		
D10	8-719-812-31	DIODE TLR123		
D11	8-719-812-31	DIODE TLR123		
D12	8-719-812-31	DIODE TLR123		
D13	8-719-812-33	DIODE TLG123A		

Ref. No	Part No.	Description		
		IC		
IC1	8-752-240-28	IC TC4028BP		
IC2	8-752-120-03	IC μPA2003C		
IC3	8-759-240-28	IC TC4028BP		
IC4	8-759-120-03	IC μPA2003C		
		RESISTOR		
R1	1-247-179-00	CARBON	100K	1/4W
R2	1-247-179-00	CARBON	100K	1/4W
R3	1-247-179-00	CARBON	100K	1/4W
R4	1-247-131-00	CARBON	1K	1/4W
R5	1-247-121-00	CARBON	390	1/4W
R6	1-247-131-00	CARBON	1K	1/4W
R7	1-247-179-00	CARBON	100K	1/4W
R8	1-247-179-00	CARBON	100K	1/4W
R9	1-247-179-00	CARBON	100K	1/4W
R10	1-247-121-00	CARBON	390	1/4W
R901	1-214-594-00	METAL	10	1W

2. PERIODIC CHECK AND MAINTENANCE

- Carry out the following maintenance and periodic checks in order not only to fully exhibit the functions and performance of the set, but also for the equipment and tape. After repairing, service the set as follows, regarless of the length of use.

2-1. CLEANING OF ROTARY DRUM ASSEMBLY

1) Gently apply chamois cloth (Ref. No. J-2) soaked in cleaning liquif (Ref. No.J-1) to the rotary drum assembly.
   Clean it by rotating the upper rotary drum assembly slowly counterclockwise by hand.

Note : Do not rotate the motor by power or rotate the upper rotary drum assembly clockwise by hand. Also, the head tip is highly likely to be damaged if the chamois cloth is moved in a pependicular direction to the it. make sure to follow the instructions above for cleaning the rotarydrum assembly.

2-2. CLEANING OF TAPE PATH (Fig.7)

1) In the USE mode, clean the tape running system (TG - 1,- 2,- 3,- 4,- 5, - 6, - 7, pinch roller, and capstan shaft) and the lower drum, using a super fine applicator (Ref. No. J - 3) soaked in the cleaning liquid.

Note : Note that no oil or grease of each link mechanism adheres to the super fine applicator (Ref. No. J - 3).

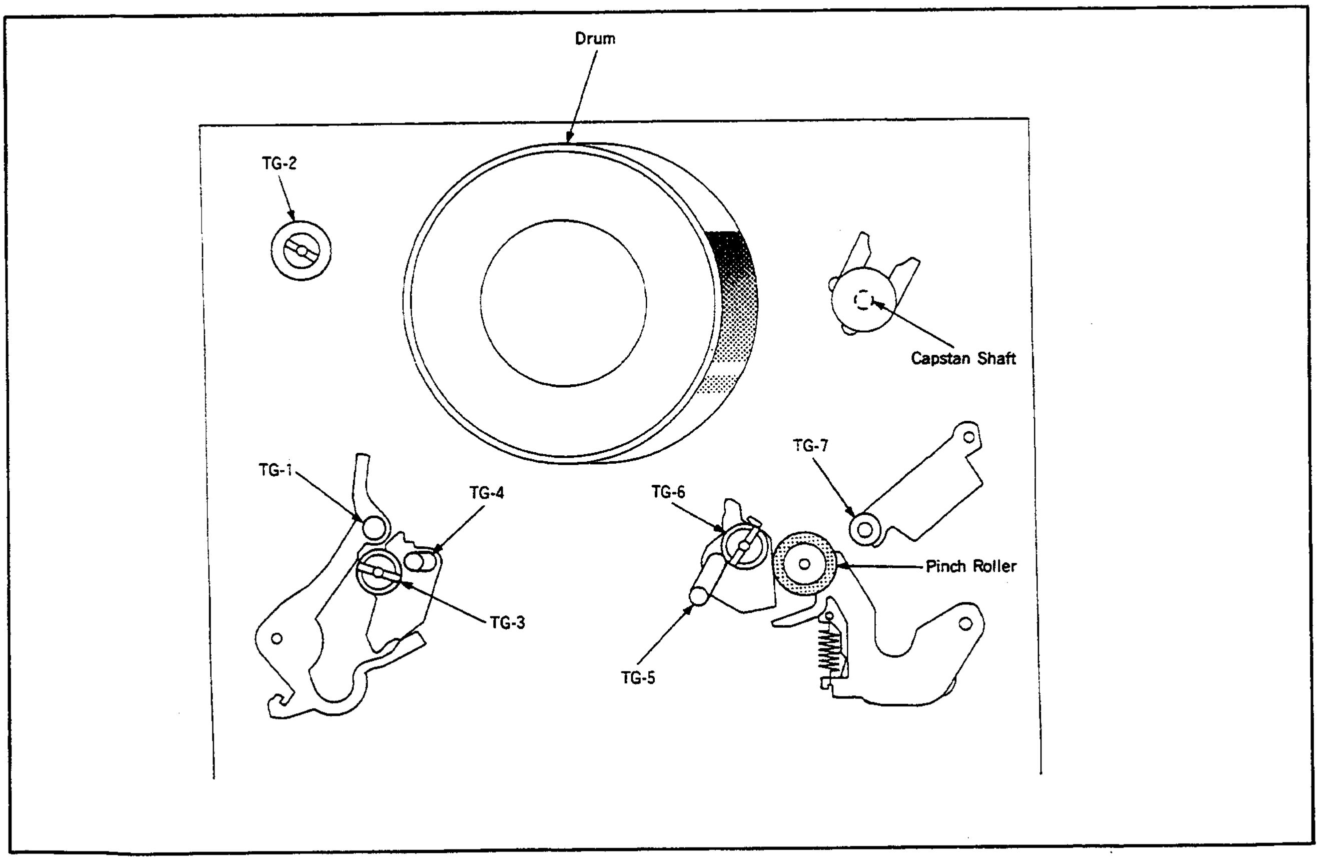


Fig. 7

2-3. PERILDIC CHECK ITEMS

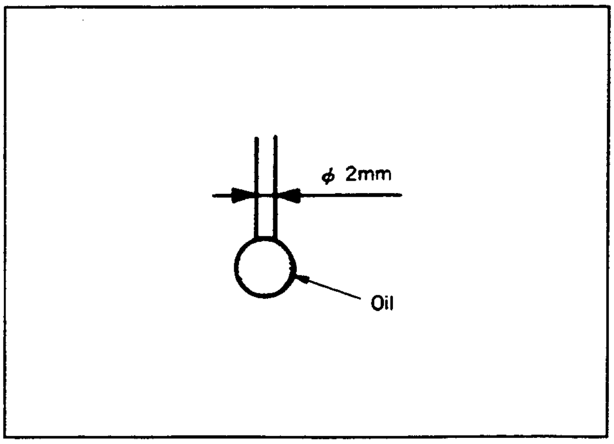
Location of Maintenance and check		Hours of Use (H)										Remarks
		500	1000	1500	2000	2500	3000	3500	4000	4500	5000	
Tape trans-portion System	Cleaning of tape path surface	○	○	○	○	○	○	○	○	○	○	Be careful of oil
	Cleaning and degaussing of rotary assembly	○	○	○	○	○	○	○	○	○	○	Be careful of oil
Driving System	Relay belt	—	☆	—	☆	—	☆	—	☆	—	☆	3-944-539-01
	Capstan shaft	—	◎	—	◎	—	◎	—	◎	—	◎	Be adsolutely careful not to get oil on the tape path surface.
	Relay pulley shaft	—	◎	—	◎	—	◎	—	◎	—	◎	
	Loading motor	—	☆	—	☆	—	☆	—	☆	—	☆	A-7040-304-A
Performance Confirmation	Abnormal noise	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	
	Back tension measurement	—	☆	—	☆	—	☆	—	☆	—	☆	
	Brake system	—	☆	—	☆	—	☆	—	☆	—	☆	
	FWD. RVS torque measurement	—	☆	—	☆	—	☆	—	☆	—	☆	

○ : Cleaning ◎ : Oil ☆ : Confirmation

Note : When overhauling, refer to the items above to replace parts.

Note : Concerning oil

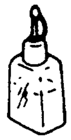
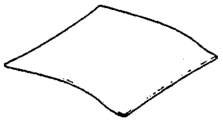
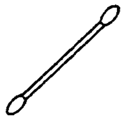
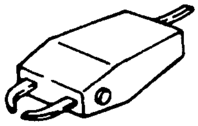
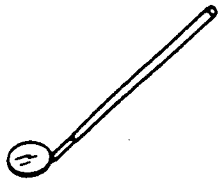
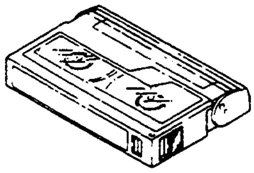
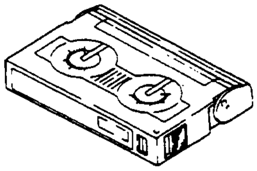
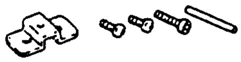
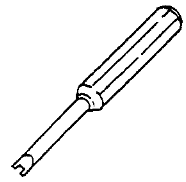
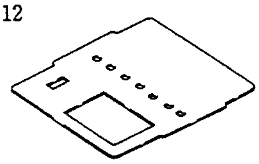
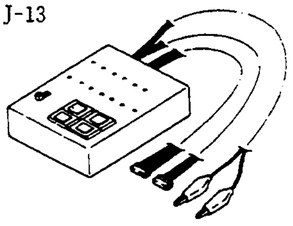
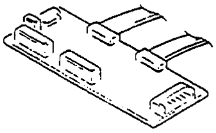
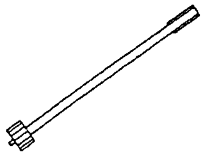
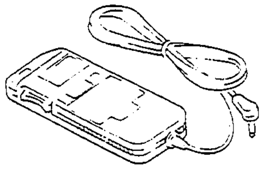
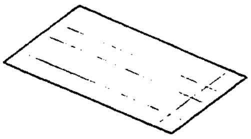
- Be sure to use specified oil. (If you use oil with different visicosity, etc., it may cause troubles.)
  Oil : Part No. 7-661-018-18 (Mitsubishi Diamond Oil Hydrofluid NT - 68)
- When lubricating bearings, be sure use oil free from dust, etc. (If you use oil with dust, etc. contained, it may cause bearings to be worn out or seized.)
- A drip of oil refers to an amount attached to the tip of a ϕ 2mm stick shown in the right figure.



2-4. Service jigs list

Ref. No.	Name	Part No.	Fixture No.	Usage and Others
J-1	Cleaning fluid	Y-2031-001-0		
J-2	Chamois cloth	2-034-697-00		
J-3	Super fine applicator (Made by NIPPON APPLICATOR, P752D)			
J-4	Head degausser	Widely available		
J-5	Small mirror for adjustment Spare mirror	J-6080-029-A J-6080-030-1	SL-5052	Tape path
J-6	Alignment tape NTSC (WR5-1N) PAL (WR5-1C)	8-967-995-01 8-967-995-06		Tape path
J-9	FWD and RVS winding torque cassette	J-6080-824-A	GD-2086	
J-10	Rotary drum jig	(Attached to the maintenance rotary upper drum)		
J-11	Screwdriver for tape path	J-6082-026-A		For tape guide adjustment
J-12	Mode selector Ⅳ panel	J-6082-105-A		
J-13	Mode selector	J-6080-825-A		For all models
J-14	Mode selector Ⅳ conversion connector	J-6082-167-A		
J-15	FWD B.T. adjusting driver	J-6082-182-A		
J-16	Adjusting remote controller	J-6082-053-B		Tape path (Setting of PATH mode)
J-17	MD process table label	J-6082-166-A		

Other equipment ● Oscilloscope
● Analog tester (20 kΩ)

J-1 	J-2 	J-3 	J-4 
J-5 	J-6 	J-9 	J-10  (Attached to the maintenance rotary upper drum)
J-11 	J-12 	J-13 	J-14 
J-15 	J-16 	J-17 	

3. MECHANICAL CHECK, ADJUSTMENT AND REPLACEMENT

Note : Use the mode selector (Ref. No. J-13) for the following mechanical checks, adjustments and replacements.

Note : The modes in ☐ are those set by pressing the mode selector buttons.

3-1. RETAINER, GOOSENECK ASSEMBLY (Fig. 8)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Remove a screw **1**.
3) Remove the Retainer, Gooseneck assembly **2**.

2. Mounting

1) Mount the Retainer, Gooseneck assembly **2** with its two tabs and holes of LS chassis engaged with its hole and a boss of LS chassis.
2) Tighten the screw **1**.
3) Referring to 1-1, mount the cassette compartment assembly.

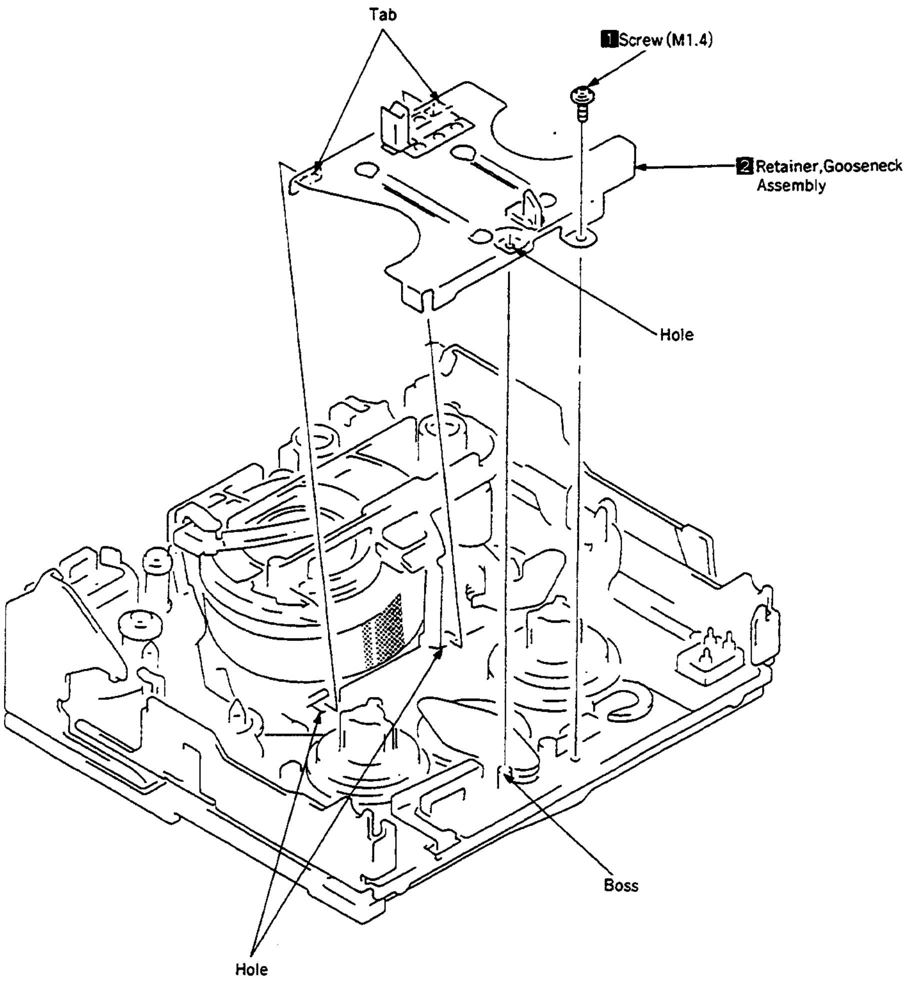


Fig. 8

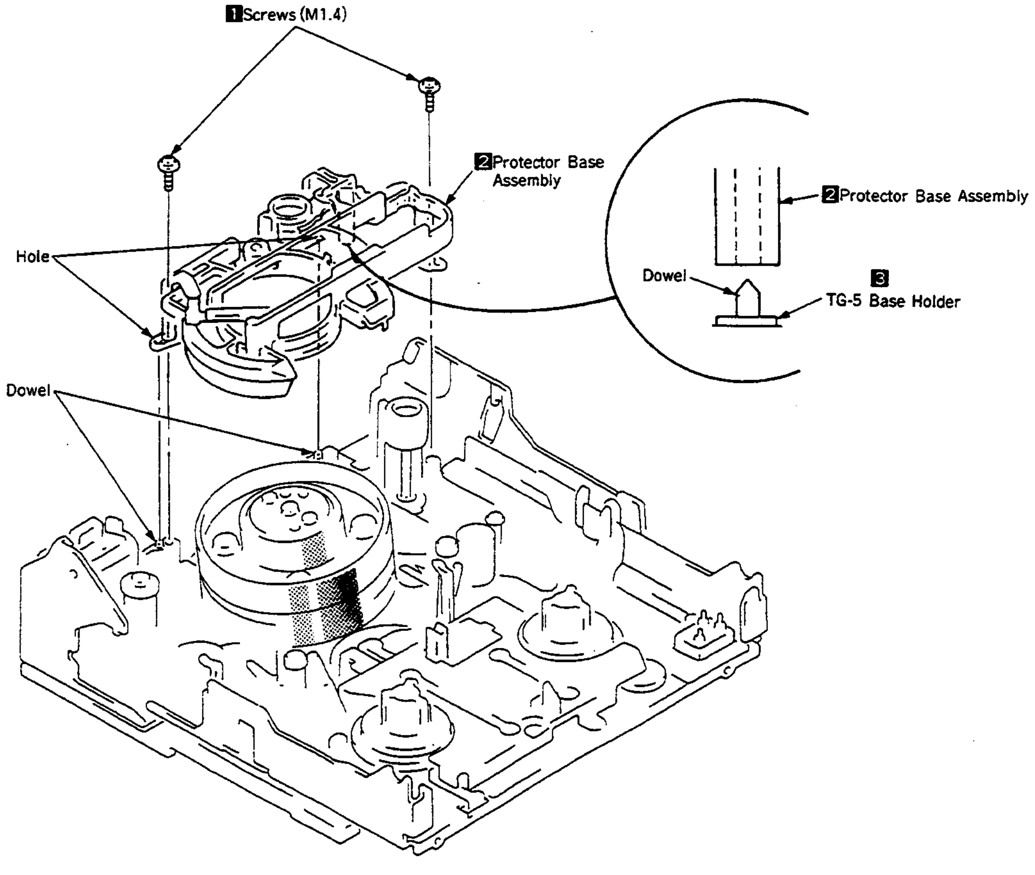
3-2. PROTECTOR BASE ASSEMBLY (Fig. 9)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Remove two screws ❶, then the protector base assembly ❷.

2. Mounting

1) Mount the protector base assembly ❷ with its three hole engaged with two dowels of mechanical chassis, and a dowel of TG-5 Base Holder ❸.
2) Tighten two screws ❶.
3) Referring to 1-1, mount the cassette compartment assembly.



❶Screws (M1.4)
❷Protector Base Assembly
Hole
Dowel
❷Protector Base Assembly
Dowel
❸ TG-5 Base Holder

Fig. 9

3-3. DRUM ASSEMBLY (Fig. 10)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-2, remove the protect base assembly.
3) Disconnect the connector of FP-444 flexible board 1 on the back of MD.
4) Remove three screw 2, then the drum assembly 3.

Note : Do not touch the outer surfaced of drum (hold portions Ⓐ and Ⓑ of drum).

2. Mounting

1) Mount the drum assembly 3 while aligning with two dowels ⓐ of chassis.

Note : Do not touch the outer surfaced of drum (hold portions Ⓐ and Ⓑ of drum).

2) Tighten three screw assemblies 2 in the order of 1, 2 and 3.

Note : Tighten lightly not to deform the drum lead.

3) Apply a screw locking agent to prevent screws ftom loosening.

Note : In tightening the screws, pushing down the drum extremely will allow the drum to float up.

4) Connect the connector of FP-444 flexible board 1 on the back of MD.
5) Referring to 3-2, mount the protect base assembly.
6) Referring to 1-1, mount the cassette compartment assembly.

Note : After mounting, make tape path adjustment in Section 4.

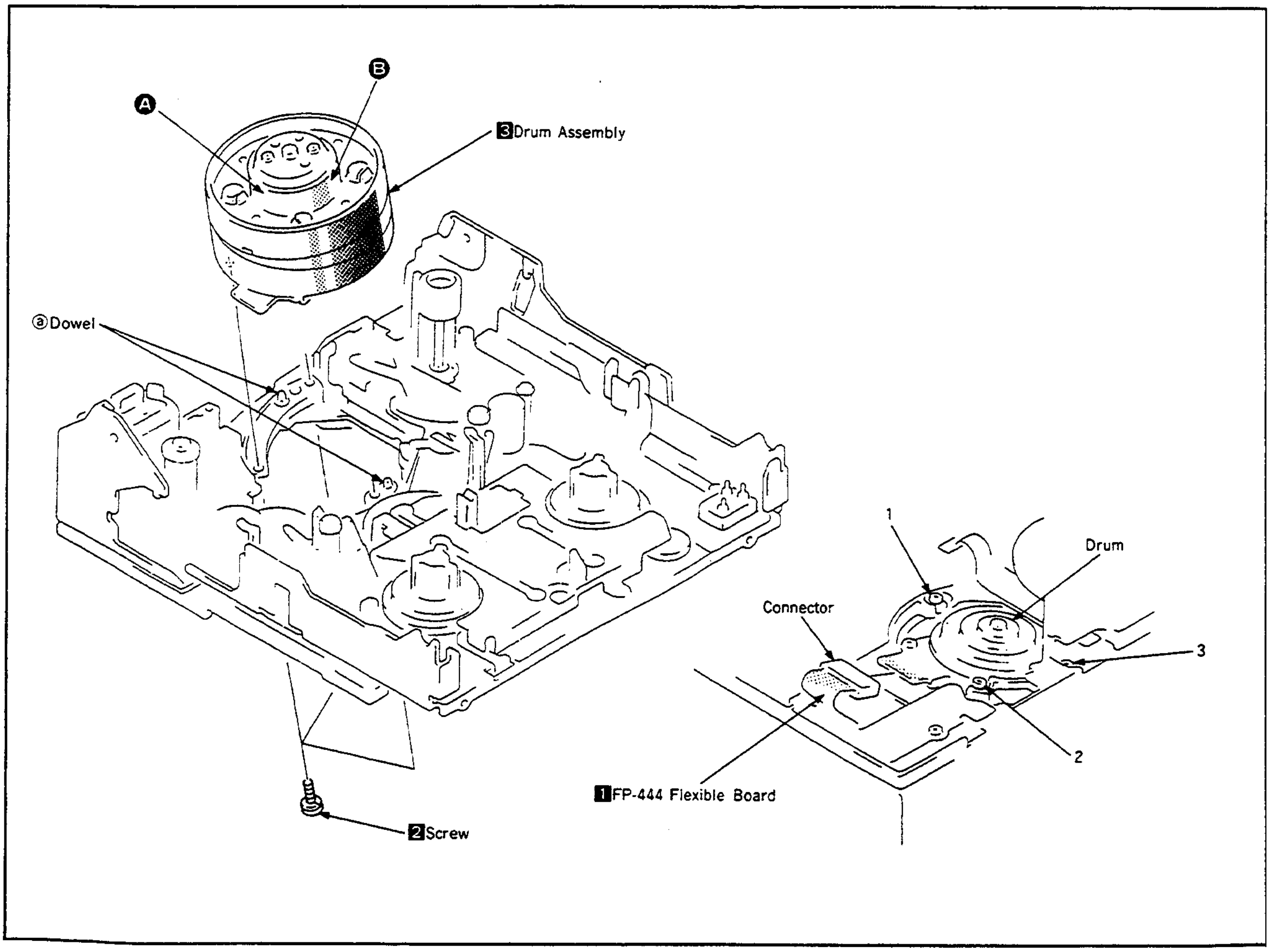


Fig. 10

3-4. CAPSTAN MOTOR ASSEMBLY (Fig. 11)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Remove two screw 1, then the capstan cover 2.
3) Remove the screw 3, then the capstan motor assembly 4.

2. Mounting

1) Mount the capstan motor assembly 4 and tighten the scre
3.

Note : In mounting the capstan motor assembly, hold lightly the capstan motor assembly until the rotor gear aligns with the change gear Assy, then insert fully the assembly when both gears are engaged completely by manually rotating the rotor. (Take care not to damage the change gear Assy.)

2) Mount the capstan cover 2 and tighten two screws 1.
3) Referring to 1-1, mount the cassette compartment assembly.

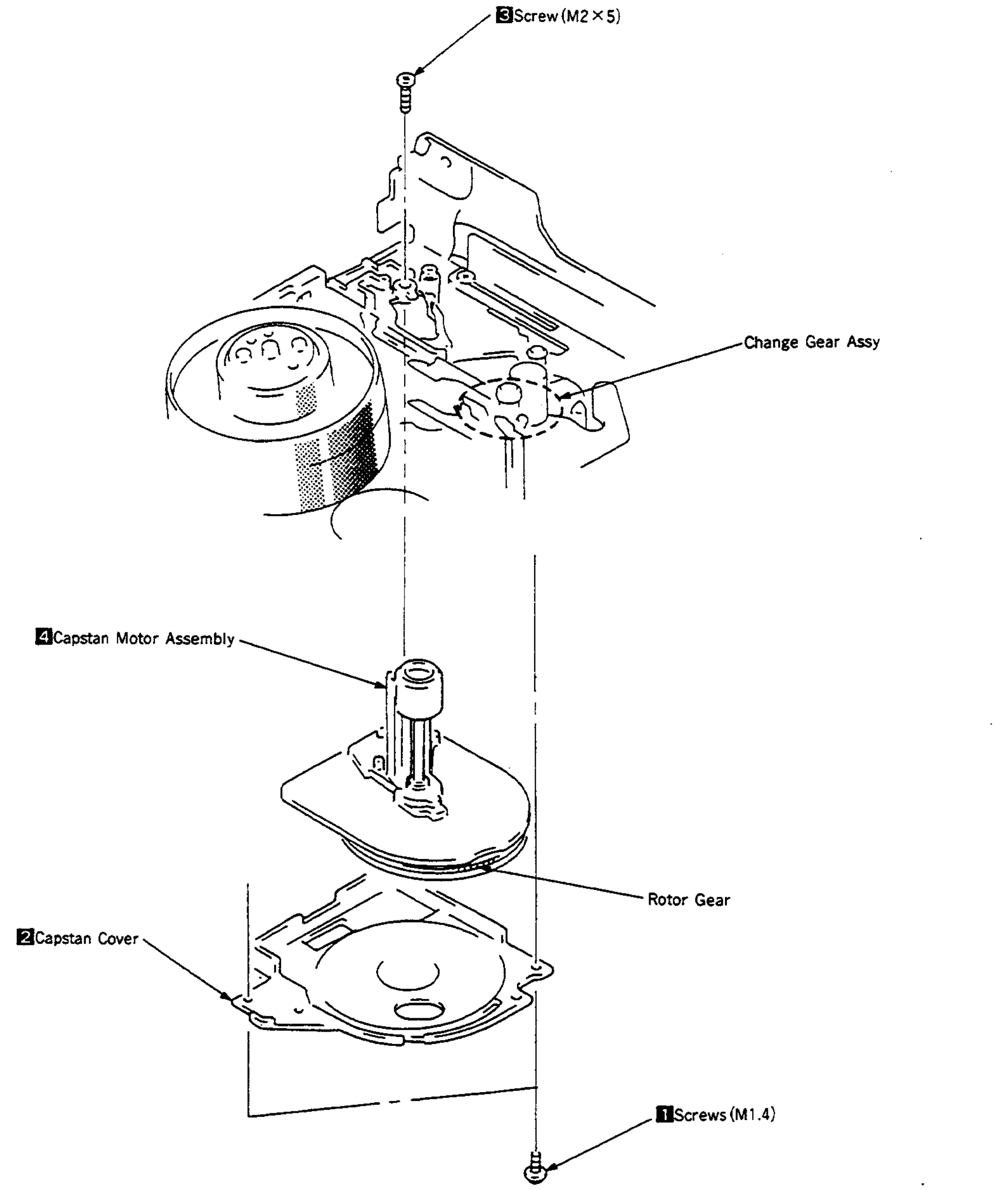

3 Screw (M2 × 5)
Change Gear Assy
4 Capstan Motor Assembly
Rotor Gear
2 Capstan Cover
1 Screws (M1.4)

Fig. 11

3-5. TAKE-UP REEL TABLE ASSEMBLY AND T- SOFT ASSEMBLY (Fig. 12)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-1, remove the Retainer, Gooseneck assembly.
3) Remove the take-up reel table assembly ❶.
4) Remove the T soft assembly ❷, then the T soft arm ❸.

2. Mounting

1) Mount the T soft arm ❸ with its long hole ⓒ engaged with the boss ⓓ of LS chassis.
2) Mount the T soft assembly ❷ with its tab ⓐ engaged with a square hole ⓑ of T soft arm, as shown in Fig. a.
3) Mount the take-up reel table assembly ❶ and rotate it toward the arrow 🅐 to be latched with T hard claw.
4) Referring to 3-1. mount the Retainer, Gooseneck assembly.
5) Referring to 1-1, mount the cassette compartment assembly.

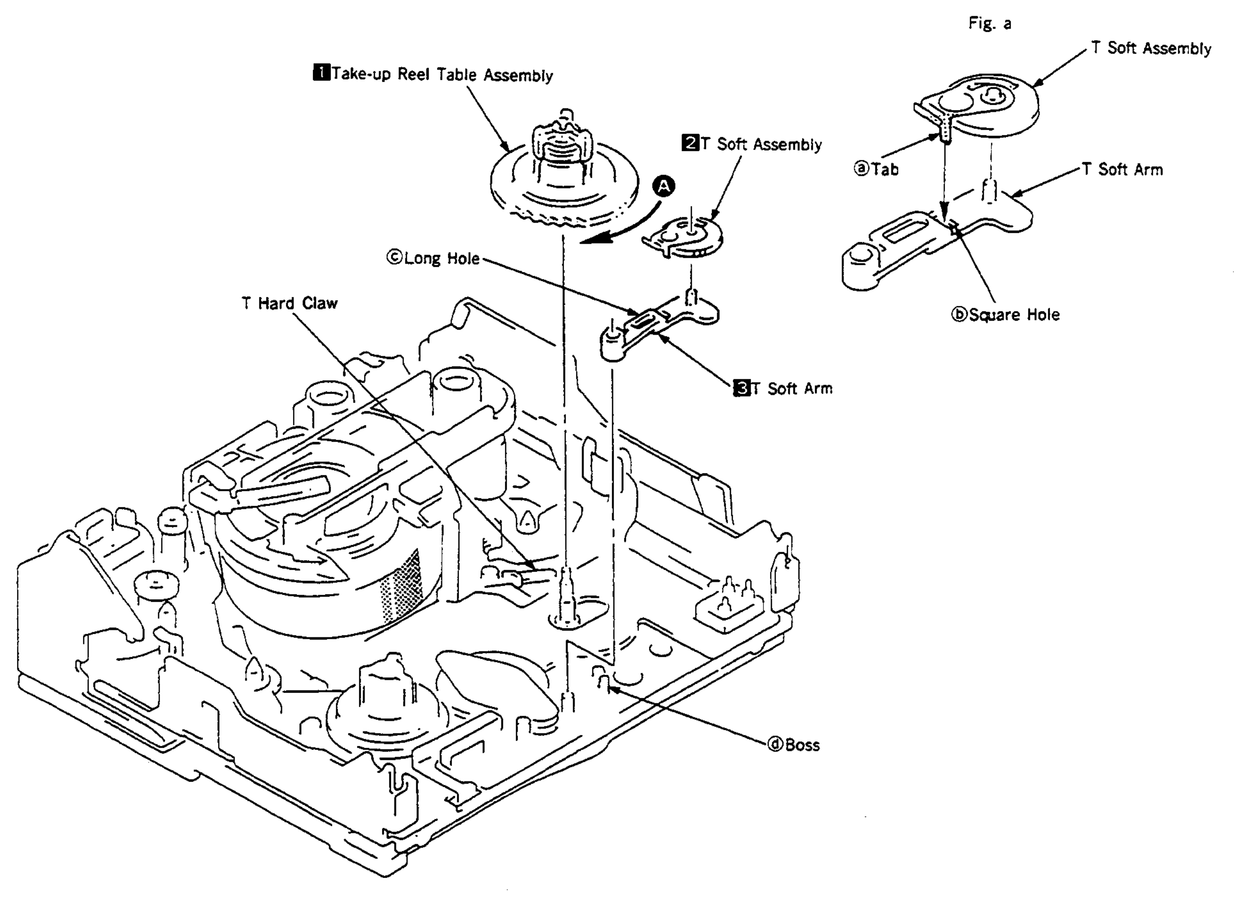


Fig. a
T Soft Assembly
ⓐTab
T Soft Arm
ⓑSquare Hole
❶Take-up Reel Table Assembly
❷T Soft Assembly
🅐
ⓒLong Hole
T Hard Claw
❸T Soft Arm
ⓓBoss

Fig. 12

3-6. PINCH ARM ASSEMBLY (Fig. 13)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Select the READY mode.
3) Remove a washer **1**, then the pinch arm assembly **2**.

2. Mounting

1) Select the READY mode.
2) Hooking a spring of pinch arm assembly **2** to the casse positioning boss on the chassis, mount the pinch arm asser bly on the shaft of LS chassis assembly as shown in Fig. a.
3) Push in the spring with tweezers up to the root of boss as shown in Fig. b.
4) Mount the washer **1**.
5) Referring to 1-1, mount the cassette compartment assembly.

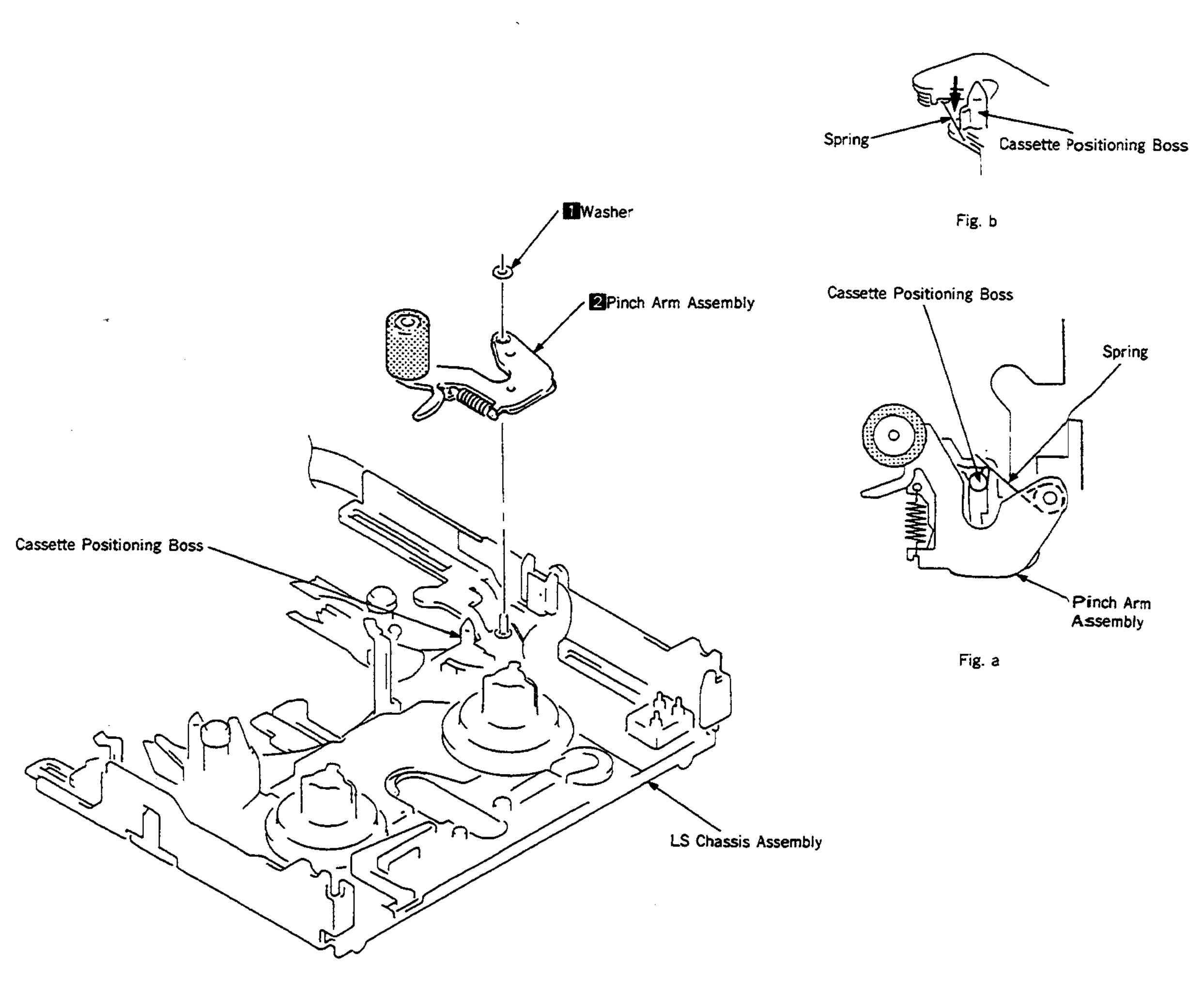

Spring
Cassette Positioning Boss
1 Washer
2 Pinch Arm Assembly
Cassette Positioning Boss
Spring
Cassette Positioning Boss
Pinch Arm Assembly
LS Chassis Assembly

Fig. b

Fig. a

Fig. 13

LS CHASSIS ASSEMBLY (Fig. 14)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-1, remove the Retainer, Gooseneck assembly.
3) Referring to 3-2, remove the protector base assembly.
4) Remove a screw ❶, TG-5 base holder ❷, and LS flexible board ❸.
5) Remove a lock washer ❹, then the gooseneck as sembly ❺.
6) Remove four screws ❻, then the LS chassis assembly ❼.

2. Mounting

1) Select the $\boxed{\text{USE}}$ mode.
2) Confirm that the T hard claw and the outsert on the back of LS chassis are positioned as shown in Fig. a. (The T hard claw must be higher than corner ⓐ of chassis hole.) If not high, turn the outsert in the arrow direction while pushing the T hard claw from LS chassis to the chassis.
3) Sliding the GL slider, align the top edge of long hole ⓑ in GL slider with the edge face ⓒ of LS chassis hole as shown in Fig. b.
4) Mount the LS chassis assembly ❼ on the chassis.

Note : At this time, aligh a dowel ⓓ on LS chassis with a long hole ⓔ of No.7 guide on chassis, a long hole of GL slider with a GL arm pin, a groove of LS cam plate with an LS arm pin respectively as shown in Fig. c and d.

5) Tighten four screws ❻.
6) Mount the LS flexible board ❸ and TG-5 base holder ❷,then tighten the screw ❶.
7) Mount the Gooseneck assembly ❺ and fix it with a washer ❹.

Note : Using the mode selector, confirm that loading and unloading are performed smoothly.

8) Referring to 3-2, mount the protector base assembly.
9) Referring to 3-1, mount the Retainer, Gooseneck assembly.
10) Referring to 1-1, mount the cassette compartment assembly.

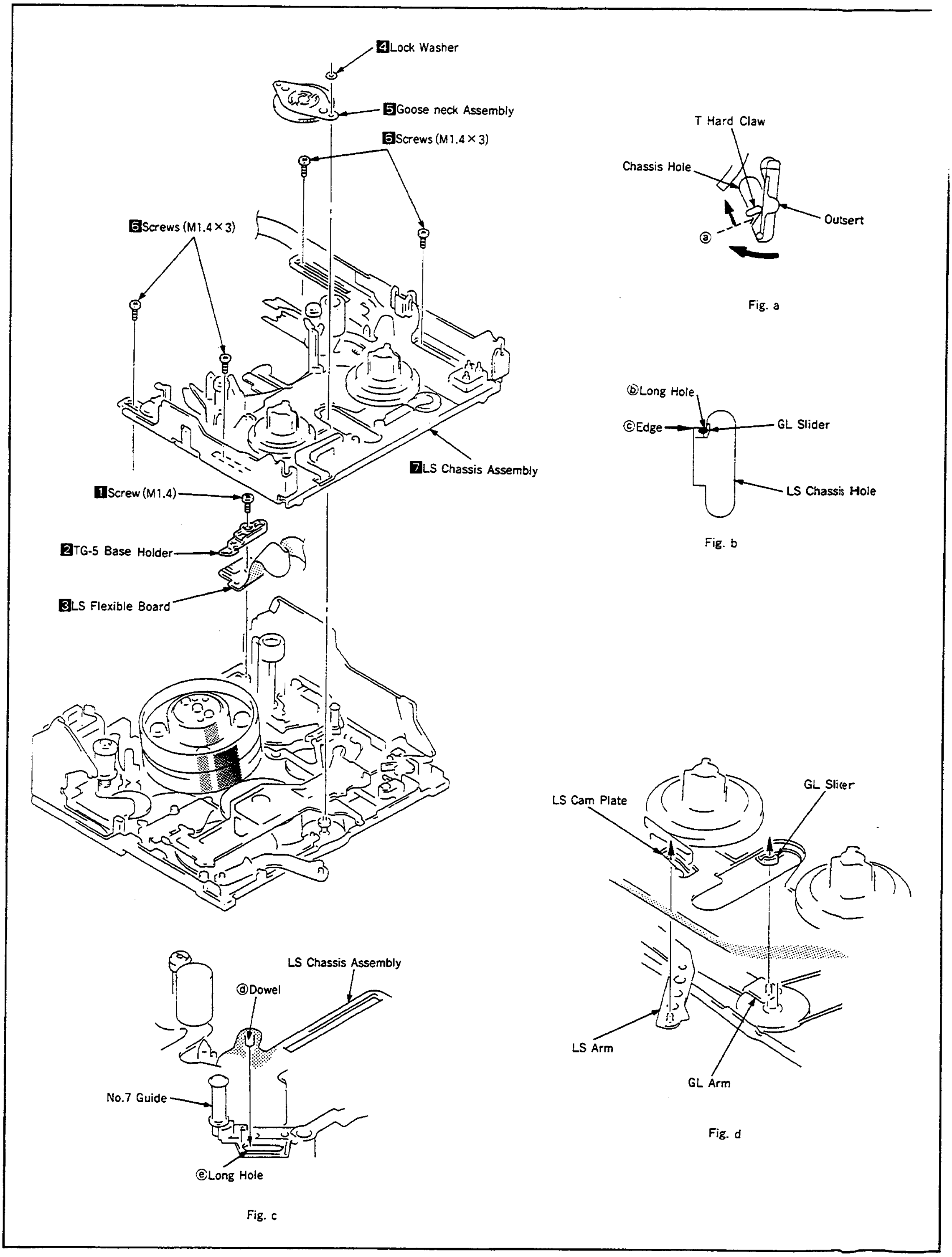

4 Lock Washer
5 Goose neck Assembly
6 Screws (M1.4 × 3)
6 Screws (M1.4 × 3)
7 LS Chassis Assembly
1 Screw (M1.4)
2 TG-5 Base Holder
3 LS Flexible Board
T Hard Claw
Chassis Hole
Outsert
ⓐ
ⓑLong Hole
ⓒEdge
GL Slider
LS Chassis Hole
LS Chassis Assembly
ⓓDowel
No.7 Guide
ⓔLong Hole
LS Cam Plate
GL Slider
LS Arm
GL Arm

Fig. a

Fig. b

Fig. c

Fig. d

Fig. 14

3- GUIDE BASE T ASSEMBLY AND GUIDE BASE S ASSEMBLY (Fig. 15, 16)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-1, remove the Retainer Gooseneck assembly.
3) Referring to 3-2, remove the protector base assembly.
4) Referring to 3-7, remove the LS chassis assembly.
5) Push in the GL slider 1 toward the arrow Ⓐ, and remove the guide base T assembly 2 and guide base S assembly 3 from the guide rail respectively as shown in Fig. 15.

Note : Do not invert the LS chassis up side down, otherwise the T reel table assembly, T soft arm and T sofr assembly will drop. Also, take care not to allow the S reel table to float up, or the tension regulator string bends. (Refer to 3-5 T Reel Table Assembly and T Soft Assembly, and 3-10 S Reel Table Assembly and TG-1 Arm Assembly.)

6) Turning the guide base T assembly 2 and guide base S assembly 3 respectively, align the shaft to hole to remove as shown in Fig. a.

2. Mounting

1) Turning the guide base T assembly 2 and guide base S assembly 3 respectively, align the shaft with a hole to mount as shown in Fig. a (Fig. 15).
2) On the back side of chassis, insert the guide arm T assembly 4, guide arm S assembly 5 and GL slider 1 from position shown in Fig.b to position shown in Fig. c. Also, aligning the guide base T assembly 2 and guide base S assembly 3 with the respective guide rails, push in the GL slider 1 toward the arrow Ⓑ as shown in Fig. 16.

Note : Do not invert the LS chassis up side down, otherwise the T reel table assembly, T soft arm and T soft assembly will drop. Also, take care not to allow the S reel table to float up, or the tension regulator string bends. (Refer to 3-5 T Reel Table Assembly and T Soft Assembly, and 3-10 S Reel Table Assembly and TG-1 Arm Assembly.)

3) Referring to 3-7, mount the LS chassis assembly.
4) Referring to 3-2, mount the protector base assembly.
5) Referring to 3-1, mount the Retainer, Gooseneck assembly.

Note : At this time, confirm that the T soft assembly is surely engaged with the T soft arm.

6) Referring to 1-1, mount the cassette compartment assembly.

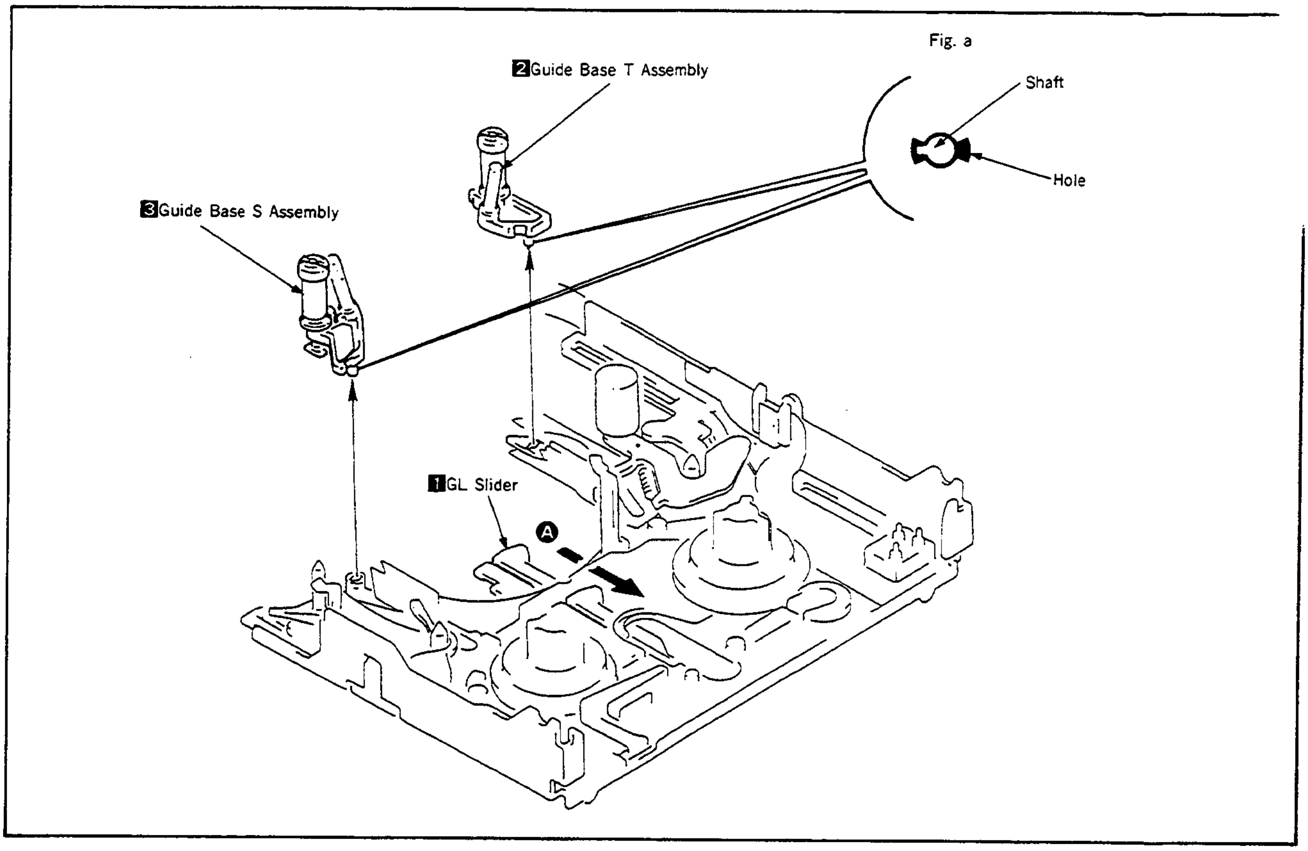


Fig. a
2 Guide Base T Assembly
Shaft
Hole
3 Guide Base S Assembly
1 GL Slider
A

Fig. 15

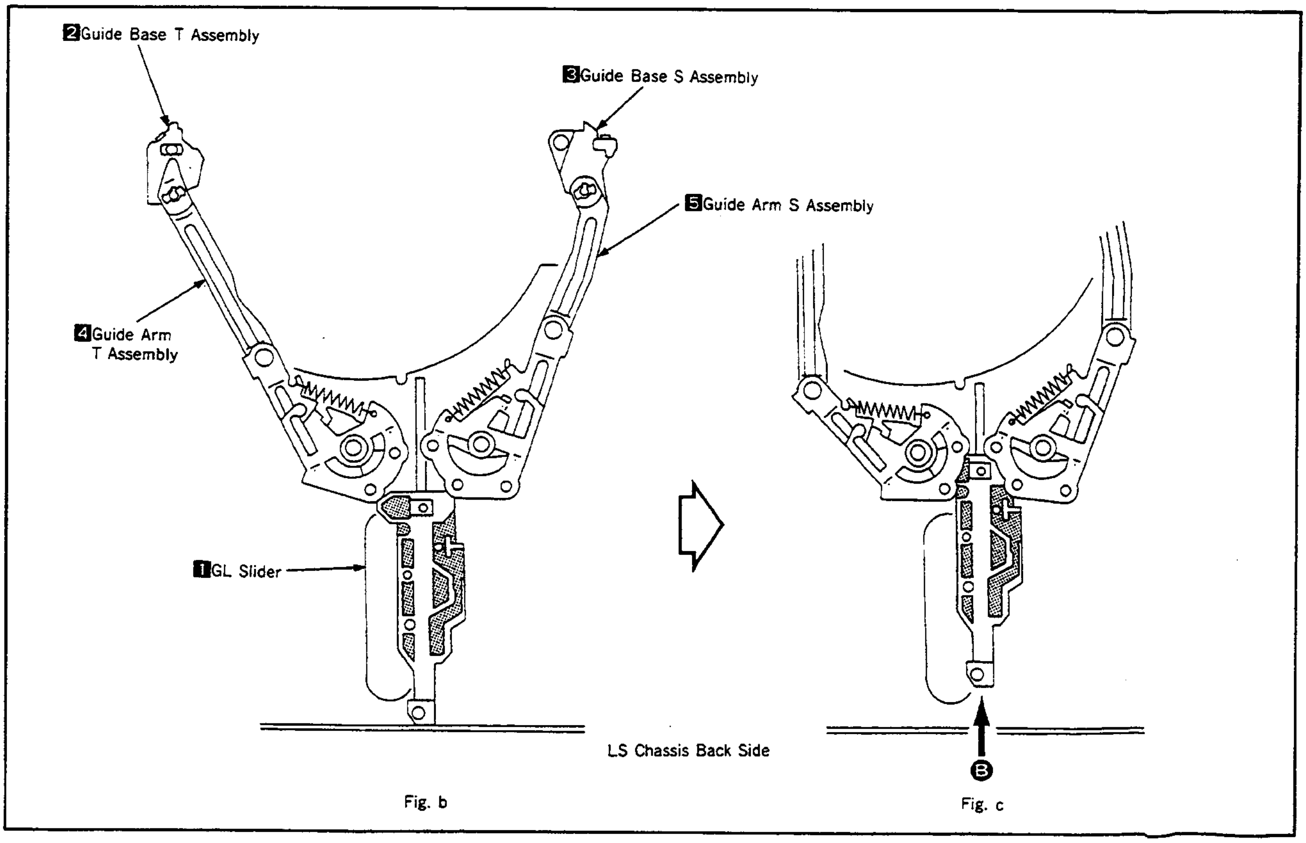

2 Guide Base T Assembly
3 Guide Base S Assembly
5 Guide Arm S Assembly
4 Guide Arm T Assembly
1 GL Slider
LS Chassis Back Side
B

Fig. b

Fig. c

Fig. 16

3 GUIDE ARM T ASSEMBLY AND GUIDE ARM S ASSEMBLY (Fig. 17)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-1, remove the Retainer, Gooseneck assembly.
3) Referring to 3-2, remove the protector base assembly.
4) Referring to 3-7, remove the LS chassis assembly.
5) Referring to 3-8, remove the guide base T assembly and guide base S assembly.
6) Remove lock washers **1**, then the guide arm T assembly **2** and guide arm S assembly **3** respectively from the back side of chassis.

Note : Do not invert the LS chassis up side down, otherwise the T reel table assembly, T soft arm and T soft assembly will drop. Also, take care not to allow the S reel table to float up, or the tension regulator string bends. (Refer to 3-5 T Reel Table Assembly and T Soft Assmbly, and 3-10 S Reel Table Assembly and TG-1 Arm Assembly.)

2. Mounting

1) Mount the guide arm T assembly **2** and guide arm S assembly **3**, then fix them with a lock washer **1** respectively.

Note : Do not invert the LS chassis up side down, otherwise the T reel table assembly, T soft arm and T soft assembly will drop. Also, take care not to allow the S reel table to float up, or the tension regulator string bends. (Refer to 3-5 T Reel Table Assembly and T Soft Assembly, and 3-10 S Reel Table Assembly and TG-1 Arm Assembly.)

2) Referring to 3-8, mount the guide base T assembly, guide-base S assembly and GL slider.
3) Referring to 3-7, mount the LS chassis assembly.
4) Referring to 3-2, mount the protector base assembly.
5) Referring to 3-1, mount the Retainer, Gooseneck assembly.
6) Referring to 1-1, mount the cassette compartment assembly.

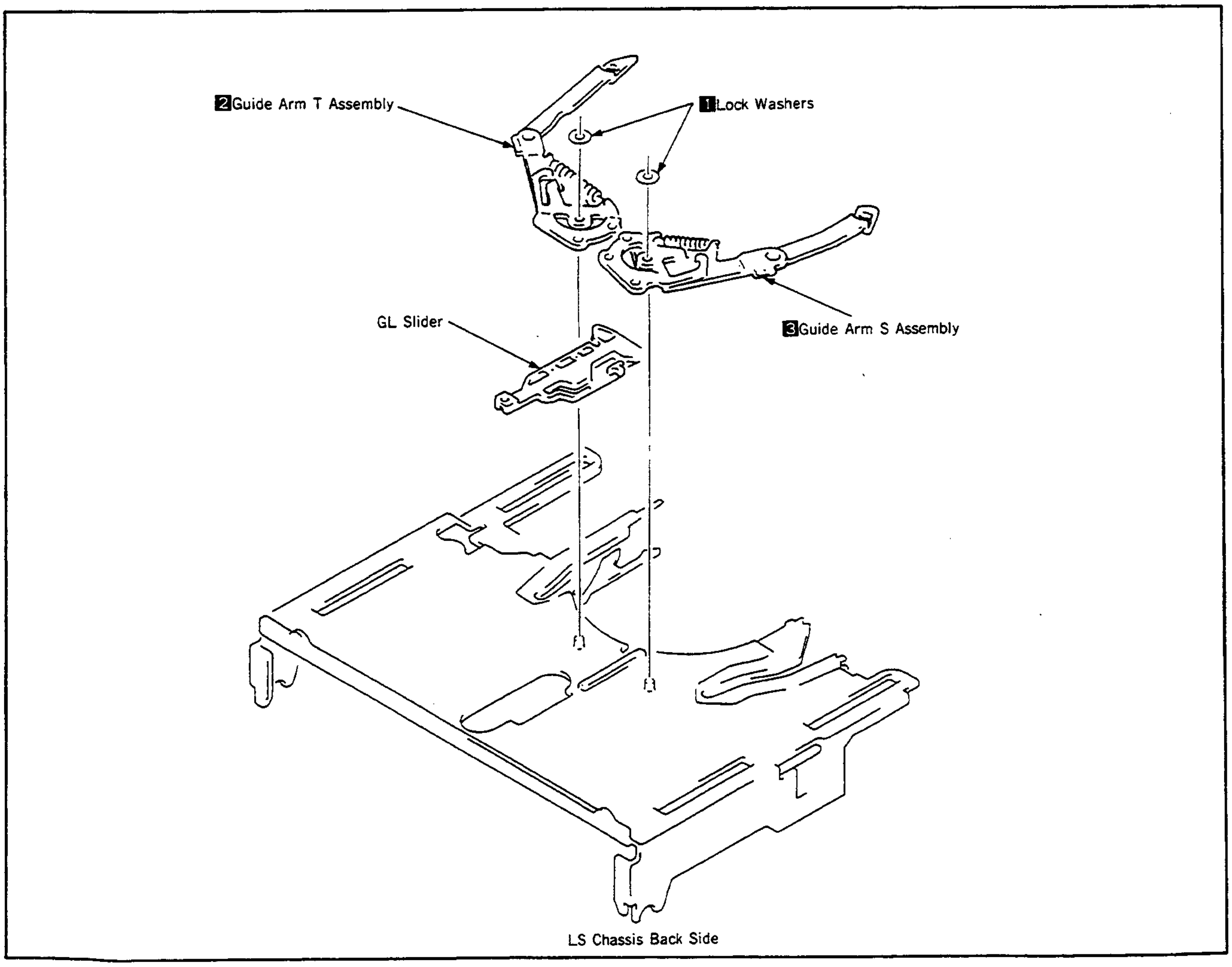


Fig. 17

3-10. SUPPLY REEL TABLE ASSEMBLY AND TG-1 ARM ASSEMBLY (Fig. 18)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-1, remove the Retainer, Gooseneck assembly.
3) Referring to 3-2, remove the protector base assembly.
4) Referring to 3-7, remove the LS chassis assembly.
5) Referring to 3-8, remove the guide base S assembly.
6) Remove a screw **1**, then the string **2** from the supply reel table assembly **3**. For easy removal of string block **4**, insert a flat-blade screwdriver into a groove ⓐ and push it up (Fig. a).
7) Remove the supply reel table assembly **3**.
8) Remove a tension coil spring **5**.
9) Turn the TG-1 arm assembly **6** up to a portion ⓒ of LS chassis hole in the arrow Ⓐ direction so that its tab ⓑ can be disengaged (Fig. b).

2. Mounting

1) Pushing the S soft brake **7** toward the arrow Ⓑ, mount thesupply reel table assembly **3**.
2) Route the string **2** under the TG-1 arm asembly **6**, andinsert the tab ⓑ of TG-1 arm assembly into the LS chassis hole ⓒ, then turn the TG-1 arm assembly in the reverse direction of arow Ⓐ (Fig. b).
3) Wind the string **2** along the groove of supply reel t assembly **3** (Fig. a).

Note : Do not curl the string extremely. Also, avoid adhesion oil, otherwise the image will be distorted.

4) Using the FWD B.T. adjusting driver (Ref. No. J-15), shift the string block **4** toward the arrow Ⓒ and tighten the screw **1** (Fig. a).
5) Engage the tension coil spring **5** to the chassis hook.

Note : Confirm that the string **2** is surely wound around the groove of supply reel table assembly **3** (Fig.a).

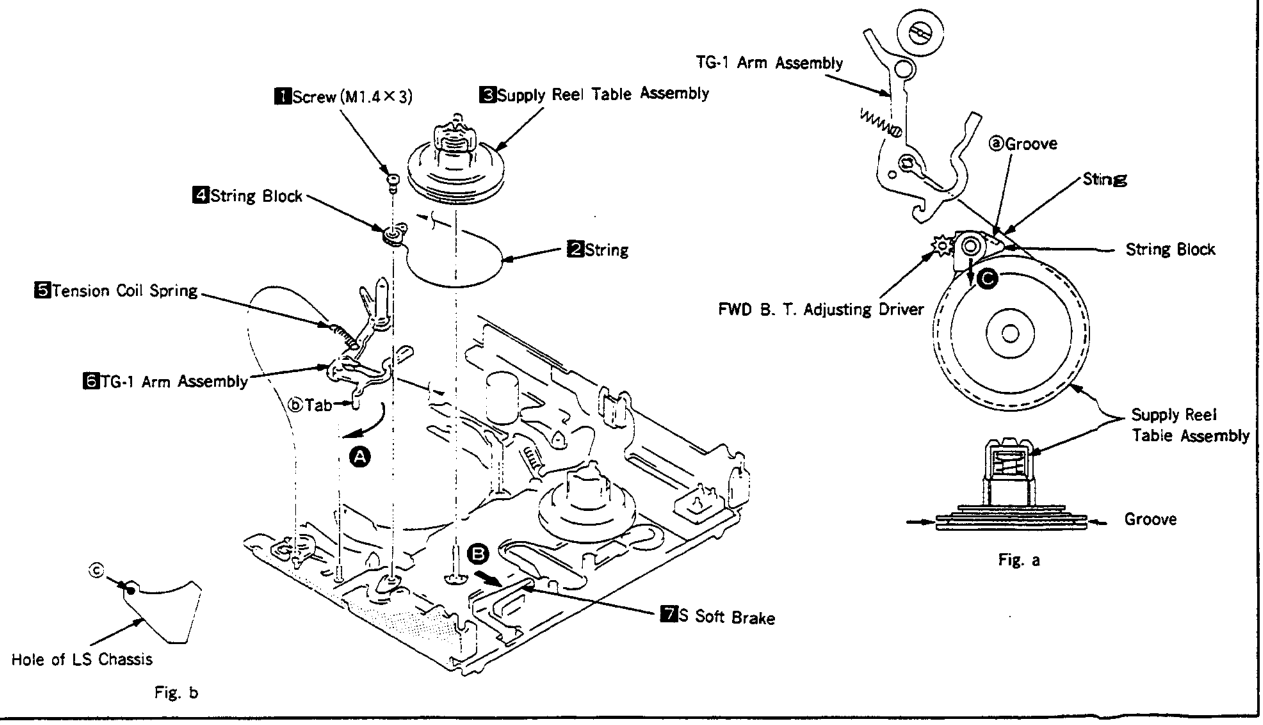
6) Referring to 3-8, mount the guide base S assembly.
7) Referring to 3-7, mount the LS chassis assembly.
8) Referring to 3-2, mount the protector base assembly.
9) Referring to 3-1, mount the Retainer, Gooseneck assembly.

Note : At this time, confirm that the T soft assembly is surely engaged with the T soft arm. (Refer to 3-5 Take-up Reel Table Assembly and Take-up Soft Assembly.)

10) Referring to 1-1, mount the cassette compartment assembly.

Note : Referring to 3-22, adjust the tension regulator position.

Note : Referring to 3-23, adjust the forward back tension.



1 Screw (M1.4×3)
3 Supply Reel Table Assembly
4 String Block
2 String
5 Tension Coil Spring
6 TG-1 Arm Assembly
ⓑ Tab
Ⓐ
Ⓑ
7 S Soft Brake
ⓒ
Hole of LS Chassis
Fig. b
TG-1 Arm Assembly
ⓐ Groove
Sting
String Block
FWD B. T. Adjusting Driver
Ⓒ
Supply Reel Table Assembly
Groove
Fig. a

Fig. 18

3 . TG-2 ROLLER ASSEMBLY (Fig. 19)

1. Removal

1) Remove the TG-2 roller assembly ❶ .
2) Remove a compression coil spring ❷ .

2. Mounting

1) Insert a compression coil spring ❷ into the boss on chassis.
2) Rotate gently the TG-2 roller assembly ❶ until the screw is engaged.

3. Presetting of TG-2 Roller Height (Fig. a)

1) Rotating the TG-2 upper flange, adjust the height of bottom face of TG-2 lower flange from the top face of dowel on the mechanical chassis to 3. 3 ± 0. 05mm.

Note : After adjustment, perform 4. TAPE PATH ADJUSTMENT.

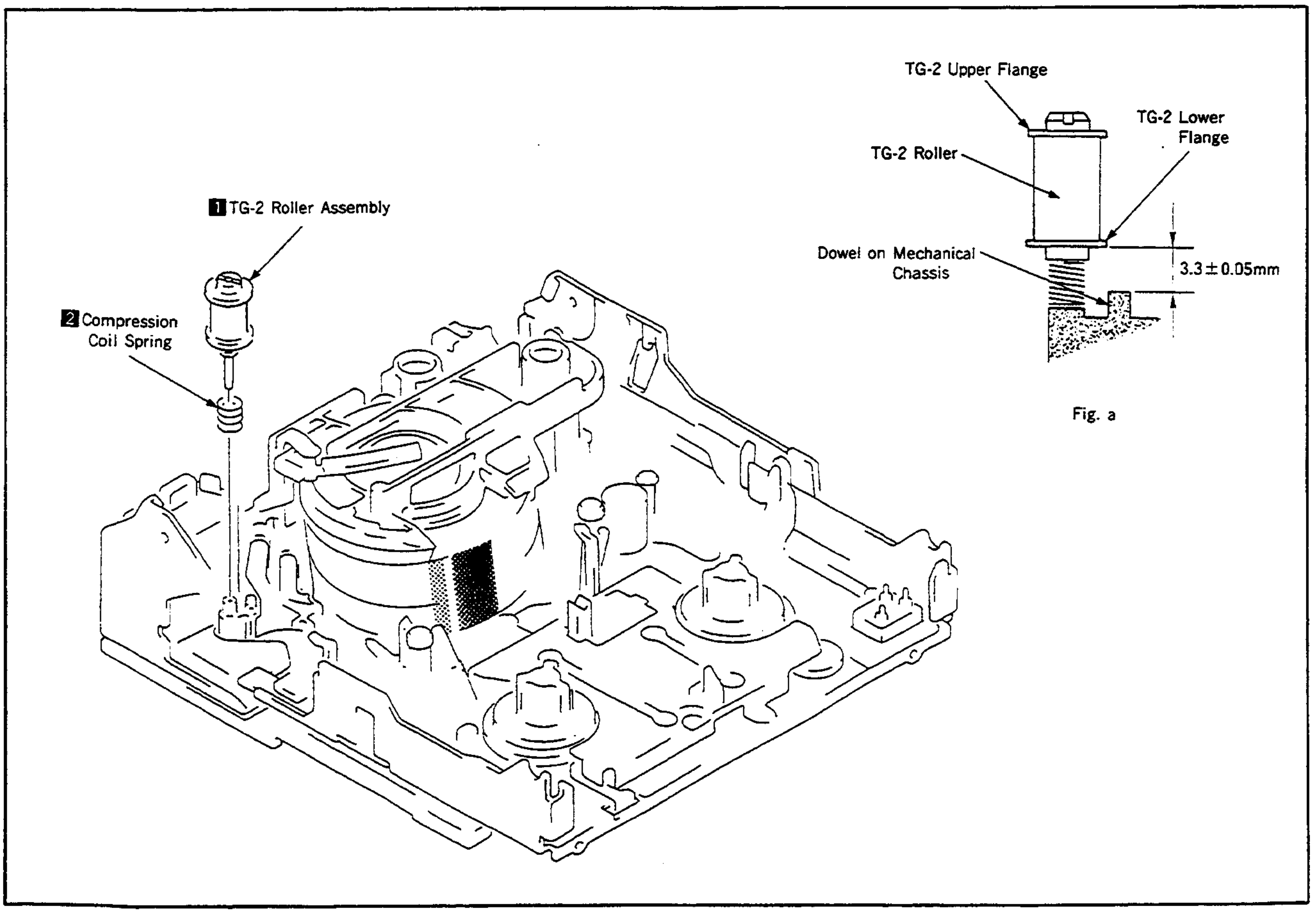

❶ TG-2 Roller Assembly
❷ Compression Coil Spring
TG-2 Upper Flange
TG-2 Lower Flange
TG-2 Roller
Dowel on Mechanical Chassis
3.3±0.05mm
Fig. a

Fig. 19

3-12. TG-7 ARM ASSEMBLY (Fig. 20)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-1, remove the Retainer, Gooseneck assembly.
3) Referring to 3-2, remove the protector base assembly.
4) Referring to 3-7, remove the LS chassis assembly.
5) Raise a portion ⓐ of TG-7 arm Leaf spring ❶ in arrow direction with a flat-blade screwdriver or tweezers to disengage the tab from the chassis, then remove the TG-7 arm Leaf spring as shown in Fig. a.
6) Remove the TG-7 assembly ❷ from the shaft of mechanical-chassis.

2. Mounting

1) Mount the TG-7 arm assembly ❷ to the shaft of mechanic chassis.
2) Mount the TG-7 arm Leaf spring ❶ to the mechanicalchassis.
   *Push in the tab of Leaf spring until it clicks into a detent ofchassis (Fig. a).
3) Referring to 3-7, mount the LS chassis assembly.
4) Referring to 3-2, mount the protector base assembly.
5) Referring to 3-1, mount the Retainer, Gooseneck assembly.
6) Referring to 1-1, mount the cassette compartmnet assembly.

Note : After mounting, perform 4. TAPE PATH ADJUSTMENT.

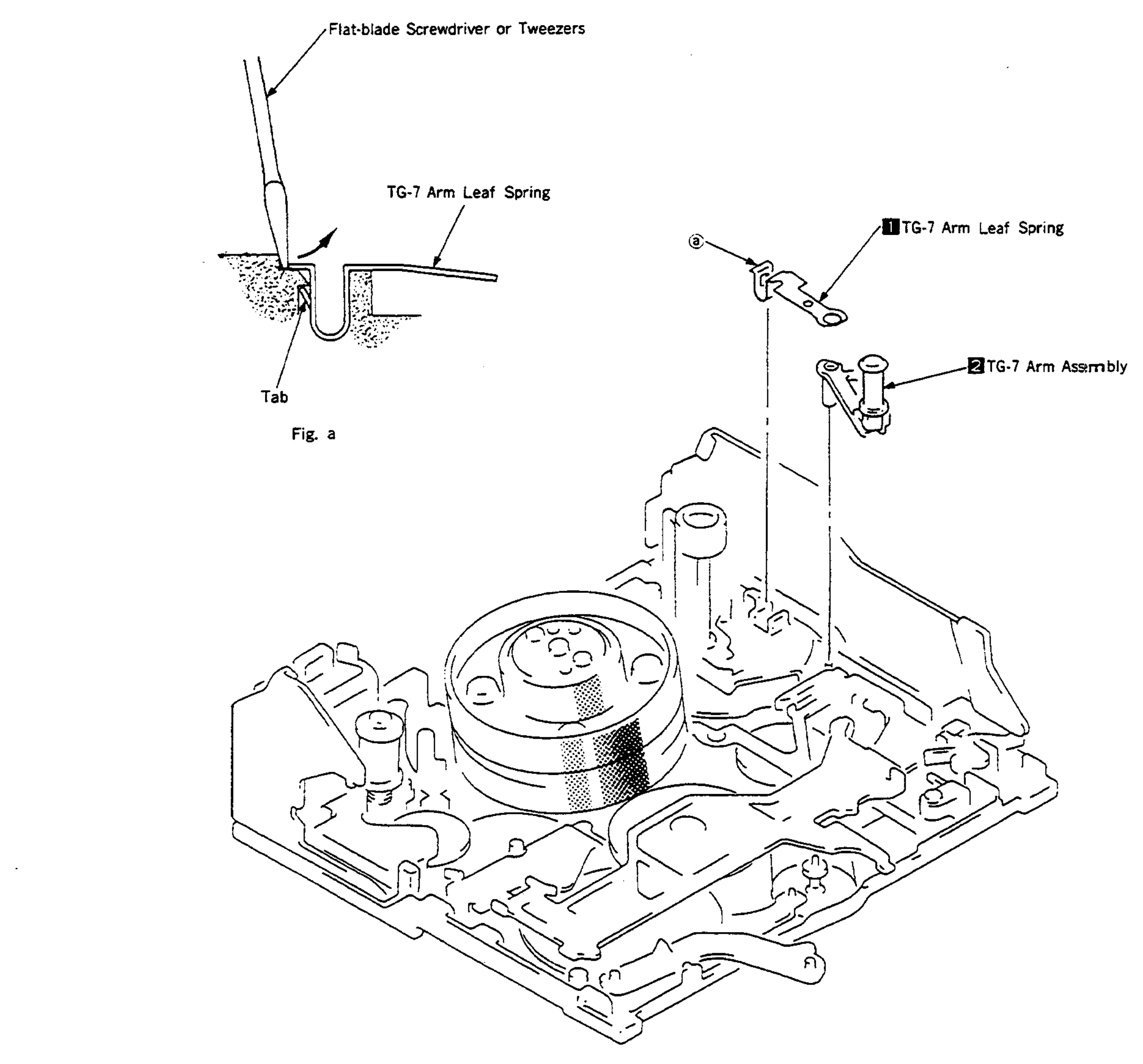


Fig. 20

3 . LM MOTOR ASSEMBLY (Fig. 21)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-1, remove the Retainer, Gooseneck assembly.
3) Referring to 3-2, remove the protector base assembly.
4) Referring to 3-7, remove the LS chassis assembly.
5) Select the LOAD mode (at the position where the FF arm assembly is not above the screw ❶).
6) Remove two screws ❶, then the LM motor assembly ❷.

2. Mounting

1) Aligning the dowel ⓐ of LM motor assembly ❷ with the hole ⓑ of mechanical chassis, mount the LM motor assembly with its hole ⓒ inserted into the mechanical chassis shaft ⓓ.
2) Tighten two screws ❶.
3) Referring to 3-7, mount the LS chassis assembly.
4) Referring to 3-2, mount the protector base assembly.
5) Referring to 3-1, mount the Retainer, Gooseneck assembly.
6) Referring to 1-1, mount the cassette compartment assembly.

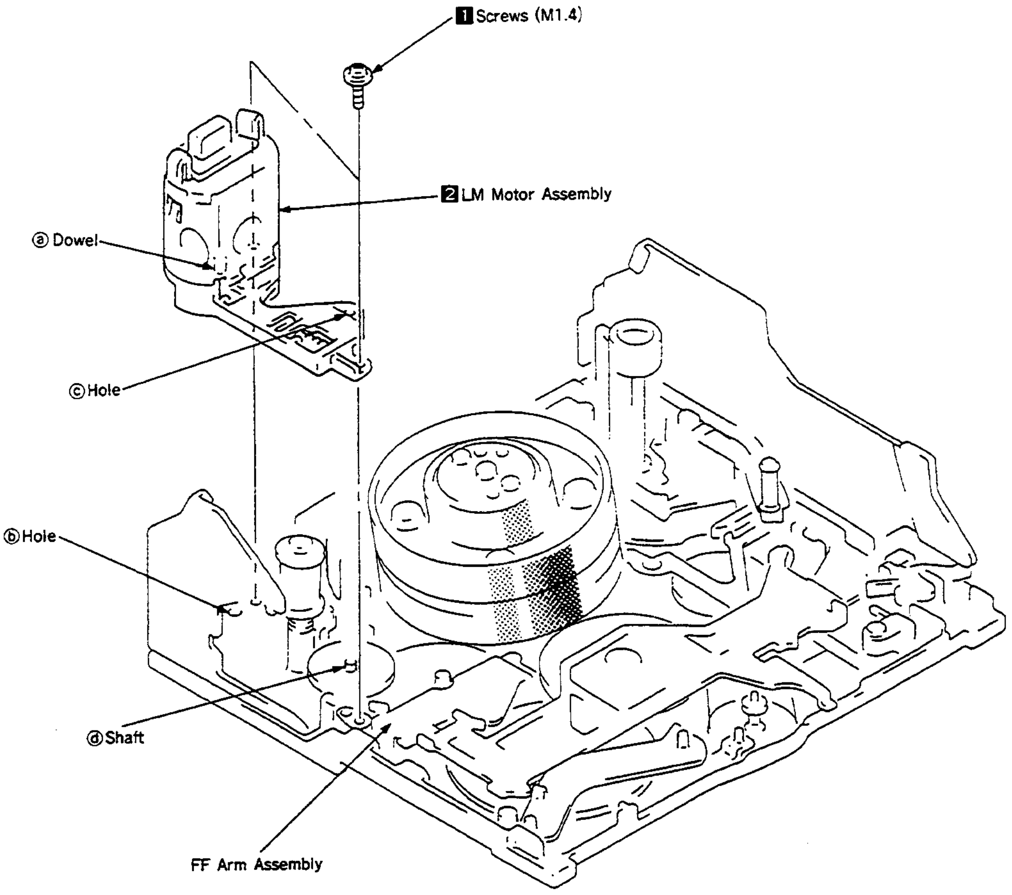


Fig. 21

3-14. LS ARM (Fig. 22)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-1, remove the Retainer, Gooseneck assembly.
3) Referring to 3-2, remove the proctector base assembly.
4) Referring to 3-7, remove the LS chassis assembly.
5) Remove the LS arm ❶ from the shaft of mechanical chassis.

Note : Take care not to drop the LS roller ❷.

2. Mounting

1) Mount the LS arm ❶ meeting with mechanical chassis sh and cam groove.

Note : Move the LS arm ❶ in arrow direction to confirm that the LS roller ❷ is surely inserted.

2) Referring to 3-7, mount the LS chassis assembly.
3) Referring to 3-2, mount the protector base assembly.
4) Referring to 3-1, mount the Retainer, Gooseneck assembly.
5) Referring to 1-1, mount the cassette compartment assembly.

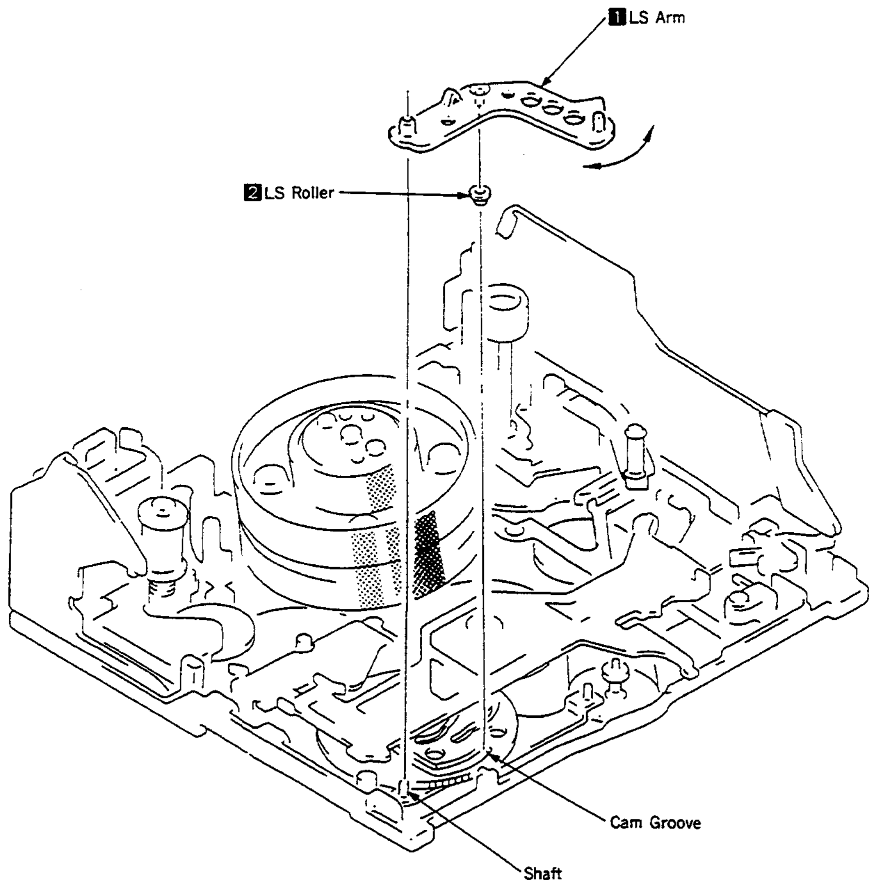


Fig. 22

. M SLIDER ASSEMBLY (Fig. 23)

Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-1, remove the Retainer, Gooseneck assembly.
3) Referring to 3-2, remove the protector base assembly.
4) Referring to 3-7, remove the LS chassis assembly.
5) Remove two screws ❶, then the gear holder ❷.
6) Remove two lock washers ❸, then the M slider assembly ❹.

2. Mounting

1) Mount the M slider assembly ❹, aligning long holes ⓐ and ⓑ of M slider assembly with shafts ⓒ and ⓓ of mechanical chassis, and a long hole ⓔ with shaft ⓕ of press arm assembly, and also shaft ⓖ with outer groove ⓗ of cam respectively.
2) Mount two lock washers ❸.
3) Mount the gear holder ❷ with its outserts ⓘ and ⓙ inserted into holes in the mechanical chassis.
4) Tighten two screws ❶.
5) Referring to 3-7, mount the LS chassis assembly.
6) Referring to 3-2, mount the protector base assembly.
7) Referring to 3-1, mount the Retainer, Gooseneck assembly.
8) Referring to 1-1, mount the cassette compartment assembly.

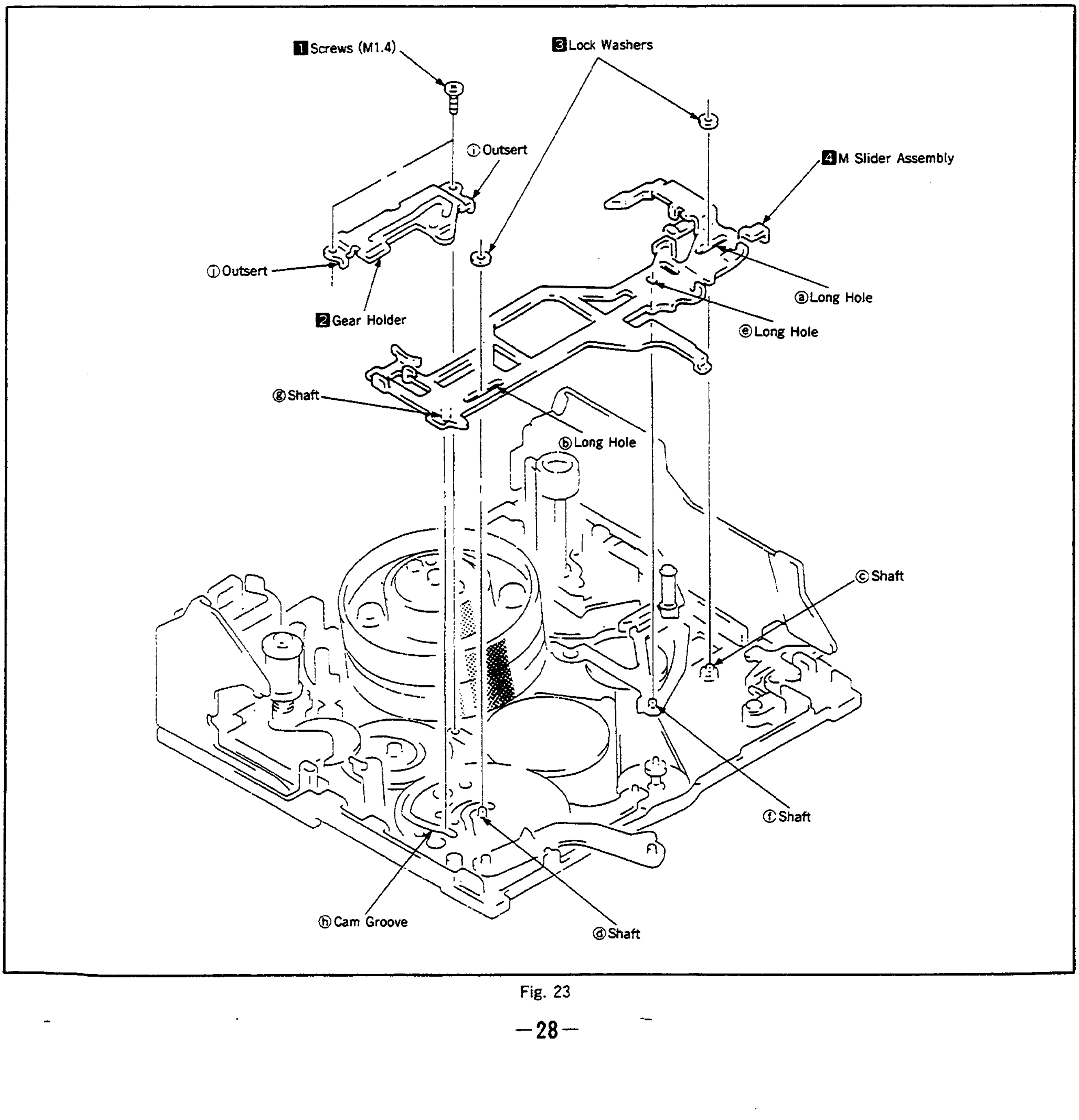

❶ Screws (M1.4)
❸ Lock Washers
ⓘ Outsert
❹ M Slider Assembly
ⓙ Outsert
ⓐ Long Hole
❷ Gear Holder
ⓔ Long Hole
ⓖ Shaft
ⓑ Long Hole
ⓒ Shaft
ⓕ Shaft
ⓗ Cam Groove
ⓓ Shaft

Fig. 23

3-16. PINCH PRESS ARM ASSEMBLY (Fig. 24)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-1, remove the Retainer, Gooseneck assembly.
3) Referring to 3-2, remove the protector base assembly.
4) Referring to 3-3, remove the drum assembly.
5) Referring to 3-7, remove the LS chassis assemvly.
6) Referring to 3-15, remove the M slider assembly.
7) Remove a lock washer **1**, then pinch press arm assembly **2**.

2.Mounting

1) Mount the pinch press arm assembly **2**, inserting its sh ⓐ into the cam groove ⓑ of HC drive arm, and hole ⓒ in the shaft ⓓ of mechanical chassis.
2) Mount the lock washer **1**.
3) After mounting, shift the pinch press arm assembly toward the arrow direction.
4) Referring to 3-15, mount the M slider assembly.
5) Referring to 3-7, mount the LS chassis assembly.
6) Referring to 3-3, mount the drum assembly.
7) Referring to 3-2, mount the protector base assembly.
8) Referring to 3-1, mount the Retainer, Gooseneck assembly.
9) Referring to 1-1, mount the cassette compartment assembly.

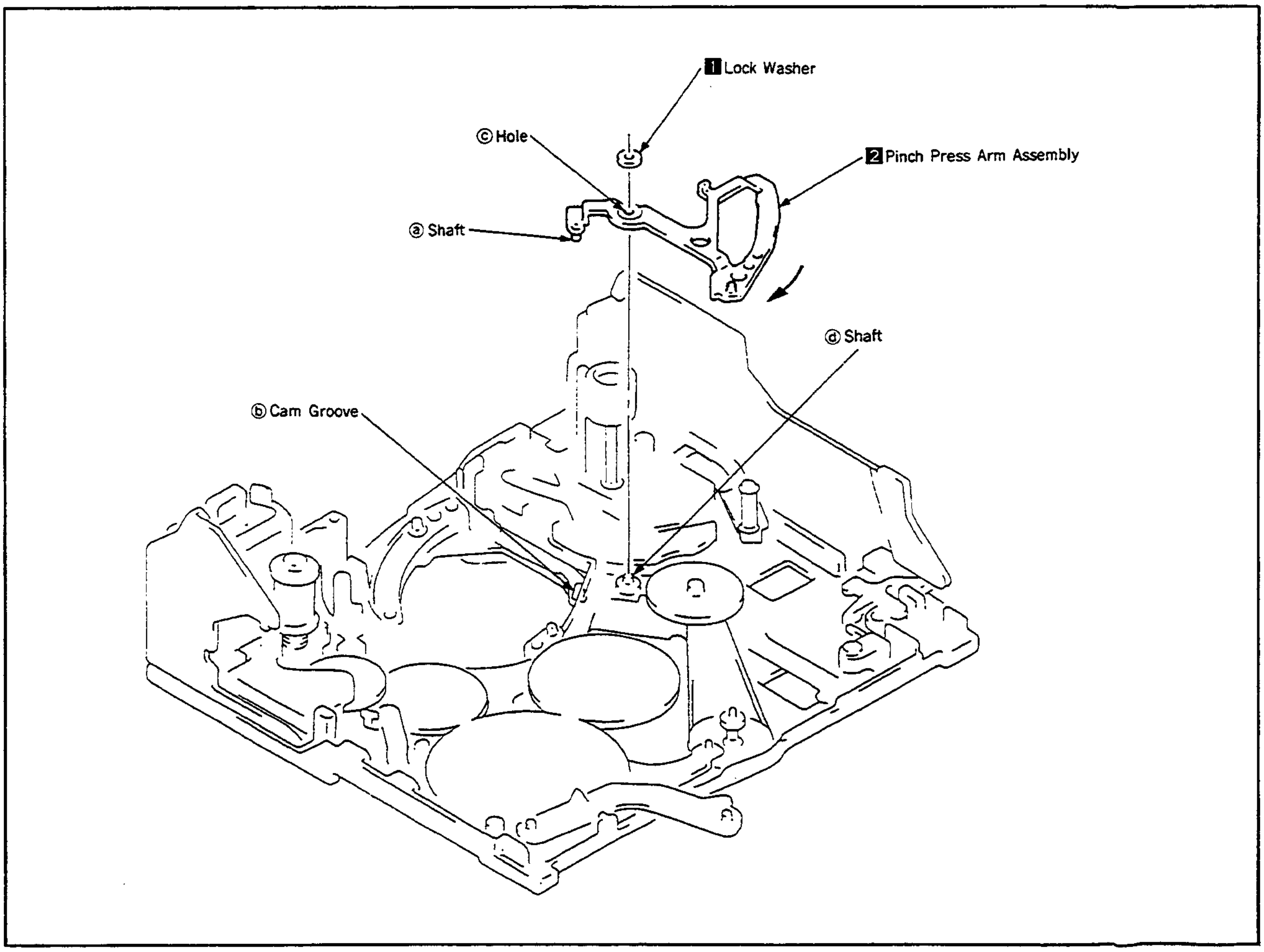


Fig. 24

7. CAM (Fig. 25)

Removal

Referring to 1-1, remove the cassette compartment assembly.
Referring to 3-1, remove the Retainer, Gooseneck assembly.
Referring to 3-2, remove the protector base assembly.
4) Referring to 3-7, remove the LS chassis assembly.
5) Referring to 3-14, remove the LS arm assembly.
6) Referring to 3-15, remove the M slider assembly.
7) Remove the cam **1**.

2. Mounting

1) Referring to 3-13, remove the LM motor assembly.

Note : Take care not to allow grease of LM motor assembly to stick to the TG-2 roller assembly.

2) Mount the cam **1**, aligning its center hole with shaft of mechanical chassis, and the cam groove with the shaft of GL arm assembly. At this time , make sure that the ▲ mark on L gear B is aligned with that on the cam and also a recess is aligned with the phase aligning hole respectively as shown in Fig. a.

Note : Apply grease to the cam groove if it scarecely remains.

3) Mount the LM motor assembly.
4) Referring to 3-15, mount the M slider assembly.
5) Referring to 3-14, mount the LS arm assembly.
6) Referring to 3-7, mount the LS chassis assembly.
7) Referring to 3-2, mount the protector base assembly.
8) Referring to 3-1, mount the Retainer, Gooseneck assembly.
9) Referring to 1-1, mount the cassette compartment assembly.

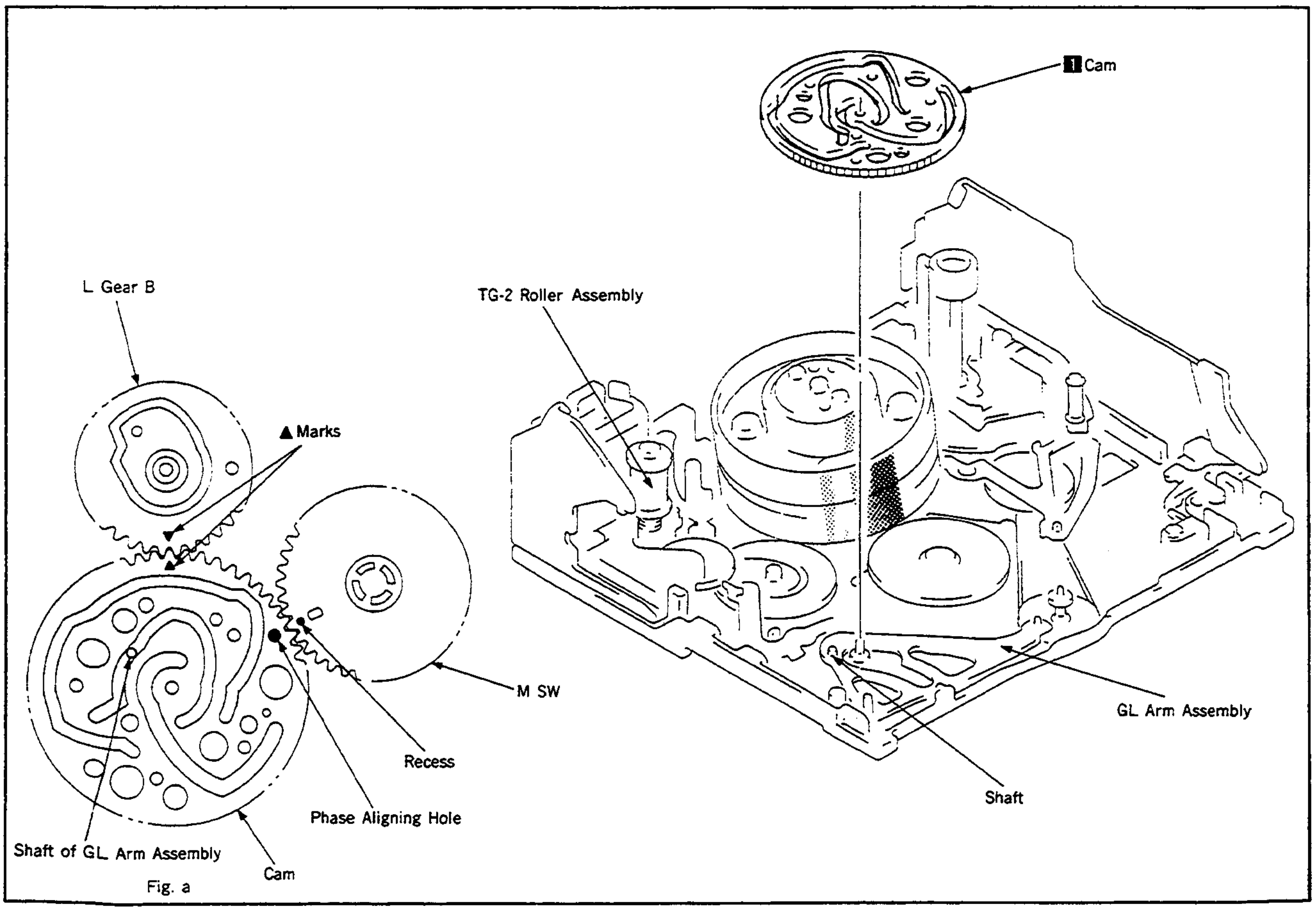


Fig. a

Fig. 25

3-18. GL ARM ASSEMBLY (Fig. 26)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-1, remove the Retainer, Gooseneck assembly.
3) Referring to 3-2, remove the protector base assembly.
4) Referring to 3-7, remove the LS chassis assembly.
5) Referring to 3-14, remove the LS arm assembly.
6) Referring to 3-15, remove the M slider assembly.
7) Referring to 3-17, remove the cam.
8) Remove the GL arm assembly ❶.

2. Mounting

1) Mount the GL arm assembly ❶ with its hole ⓐ inserted in the shaft ⓑ of mechanical chassis.
2) Referring to 3-17, mount the cam.
3) Referring to 3-15, mount the M slider assembly.
4) Referring to 3-14, mount the LS arm assembly.
5) Referring to 3-7, mount the LS chassis assembly.
6) Referring to 3-2, mount the protector base assembly.
7) Referring to 3-1, mount the Retainer, Gooseneck assembly.
8) Referring to 1-1, mount the cassette compartment assembly.

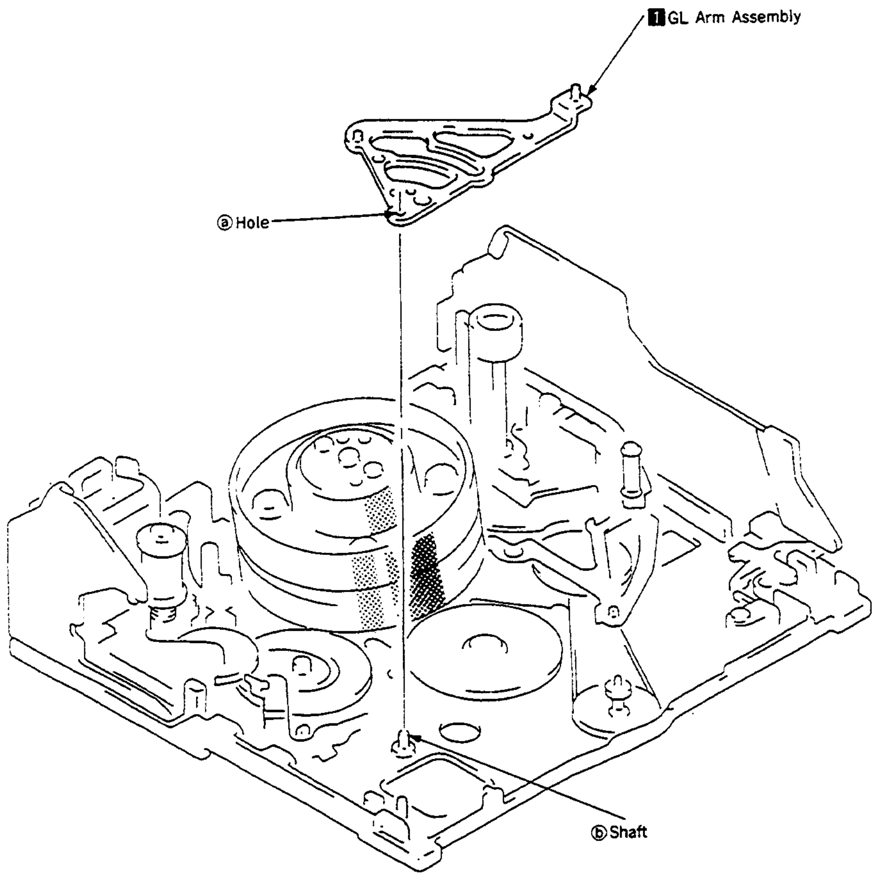


Fig. 26

9. L GEAR A AND L GEAR B (Fig. 27)

Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-1, remove the Retainer, Gooseneck assembly.
3) Referring to 3-2, remove the protector base assembly.
4) Referring to 3-7, remove the LS chassis assembly.
5) Referring to 3-14, remove the LS arm assembly.
6) Referring to 3-15, remove the M slider assembly.
7) Referring to 3-17, remove the cam.
8) Referring to 3-13, remove the LM motor assembly.
9) Remove the FF arm assembly ❶.
10) Remove the L gear A ❷.
11) Remove the L gear B ❸.

2. Mounting

1) Insert the L gear B ❸ into the shaft of mechanical chassis. (At this time, the phase aligning mark ▲ should be faced toward the cam mounting shaft ⓐ.)
2) Insert the L gear A ❷ into the shaft of mechanical chassis.
3) Mount the FF arm assembly ❶ with its two shafts inserted into the cam groove of L gear B ❸ and the hole of mechanical chassis.
4) Referring to 3-17, mount the cam.
5) Referring to 3-13, mount the LM motor assembly.
6) Referring to 3-15, mount the M sleder assembly.
7) Referring to 3-14, mount the LS arm assembly.
8) Referring to 3-7, mount the LS chassis assembly.
9) Referring to 3-2, mount the protector base assembly.
10) Referring to 3-1, mount the Retainer, Gooseneck assembly.
11) Referring to 1-1, mount the cassette compartment assembly.

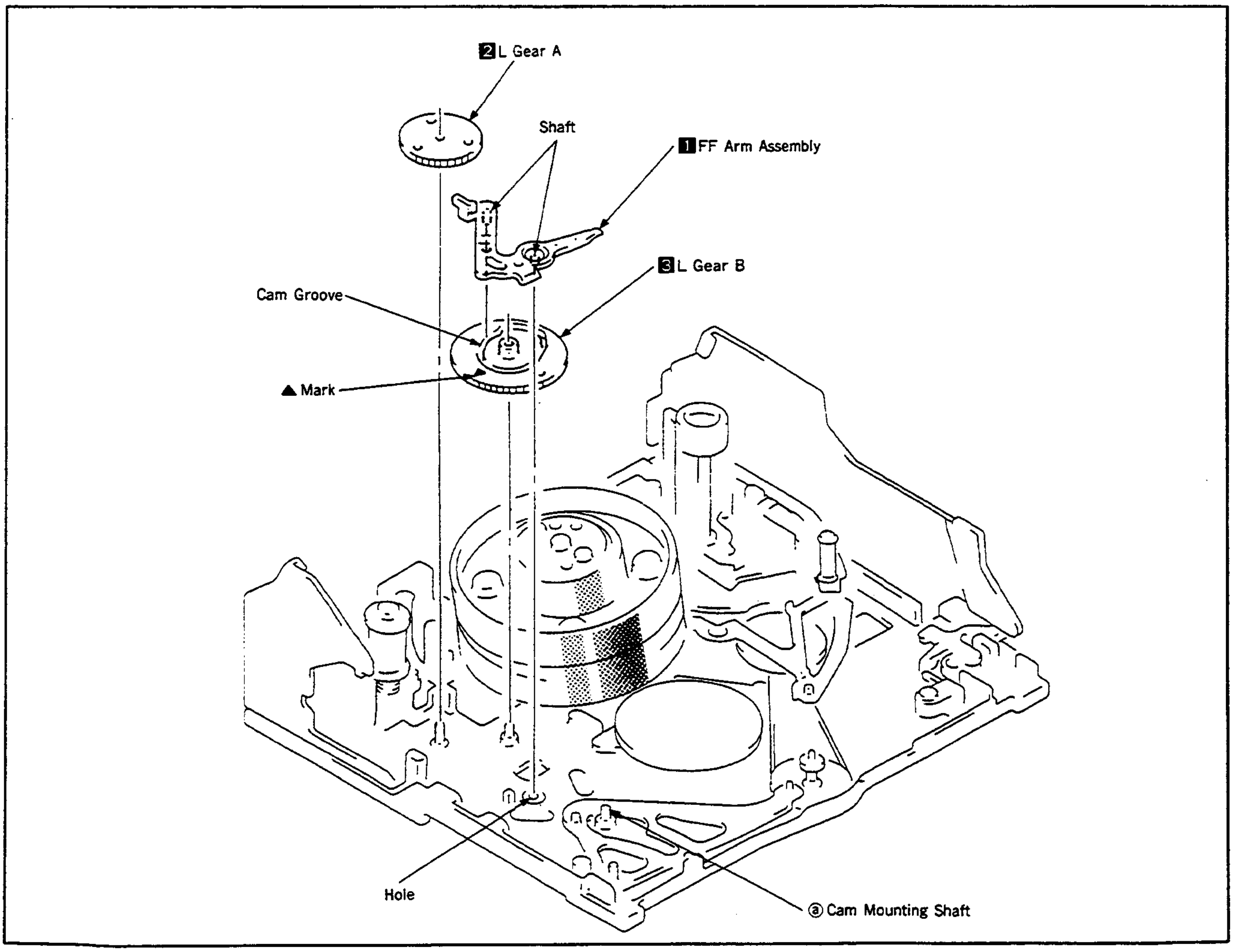


Fig. 27

3-20. RELAY PULLEY AND CHANGE GEAR ASSEMBLY (Fig. 28)

1. Removal

1) Referring to 1-1, remove the cassette compartment assembly.
2) Referring to 3-1, remove the Retainer, Gooseneck assembly.
3) Referring to 3-2, remove the protector base assembly.
4) Referring to 3-3, remove the drum assembly.
5) Referring to 3-7, remove the LS chassis assembly.
6) Referring to 3-14, remove the LS arm assembly.
7) Referring to 3-15, remove the M slider assembly.
8) Referring to 3-17, remove the cam.
9) Referring to 3-18, remove the GL arm assembly.
10) Referring to 3-16, remove the pinch press arm assembly.
11) Remove a lock washer 1, then remove together the Change gear assembly 2, relay belt 3 and relay pulley 4.

2. Mounting

*Give one or two drips of oil to the conversion gear shaft and relay pulley shaft respectively. (Oiling range is under the neck as shown in Fig. a.)

1) Hooking the relay belt 3 to the relay pulley 4 and Change gear assembly 2, mount respective parts.
   *At first, insert the relay pulley into the mechanical chassis-shaft, then the change gear assembly by engaging with the capstan motor gear.

Note : Take care not to damage the Change gear by the capstan motor gear.

2) Mount a lock washer 1.
3) Referring to 3-16, mount the pinch press arm assembly.
4) Referring to 3-18, mount the GL arm asembly.
5) Referring to 3-17, mount the cam.
6) Referring to 3-15, mount the M slider assembly.
7) Referring to 3-14, mount the LS arm assembly.
8) Referring to 3-7, mount the LS chassis assembly.
9) Referring to 3-3, mount the drum assembly.
10) Referring to 3-2, mount the protector base assembly.
11) Referring to 3-1, mount the Retainer, Gooseneck assembly.
12) Referring to 1-1, mount the cassette compartment assembly.

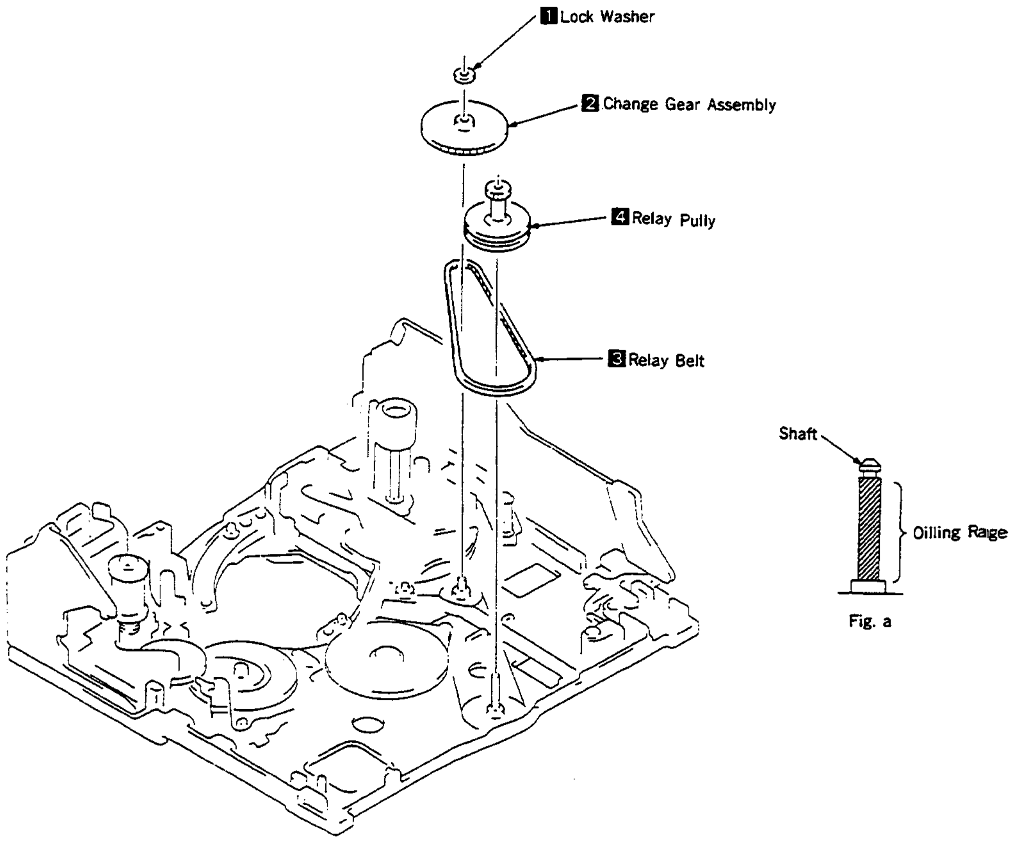


Fig. a

Fig. 28

3-21. ROTARY UPPER DRUM REPLACEMENT

1. Removoal

- If possible, make a recording before removal.

1) Remove the two screws 1 (Fig. 29).
2) Mount the jig 2 (Ref. No. J-10) with the two supplied screws 3, then screw the attached hexagon socket screws 4 to the jig 2. The rotary upper drum 5 will move upward and come off (Fig. 30).

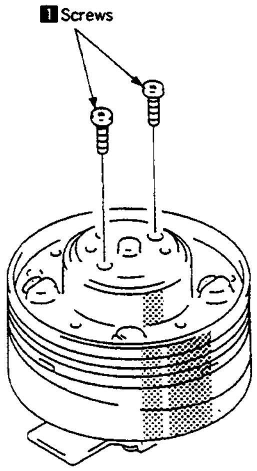


Fig. 29

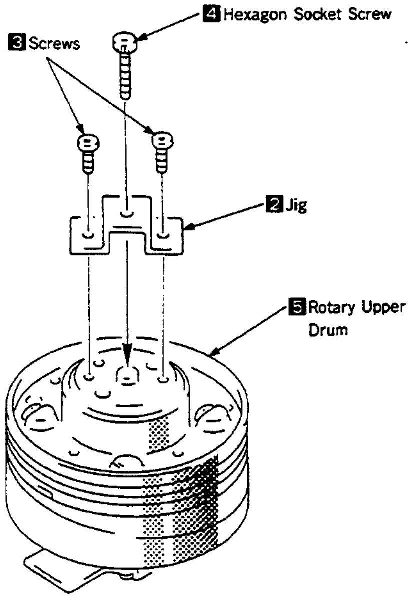


Fig. 30

2. Installation

1) Wipe clean the flange surface and the rotary upper drum 5 surface that makes contact with it, and confirm that they are free from dirt and scratches.
2) Insert the jig 6 (Ref. No. J-10) into the drum positioining hole, then set then set the rotary upper drum 5 by passing the jig through its positioning hole 7. (Fig.31)
3) Remove the jig 6 and push down the rotary upper drum 5 gently by hand. If it does not go all the way down, secure it temporarily by tightening the two screws 1 alternately (Fig.29).
4) Insert the jig 6 into the positioning hole 7 again and confirm that it goes in smoothly. If it does not, loosen the two screws 1, repeat step 2) of the Removal paragraph and restart the setting procedure.
5) Tighten the screws 1.

Note : After installing, be sure to perform tape path adjustment as described in section 4.

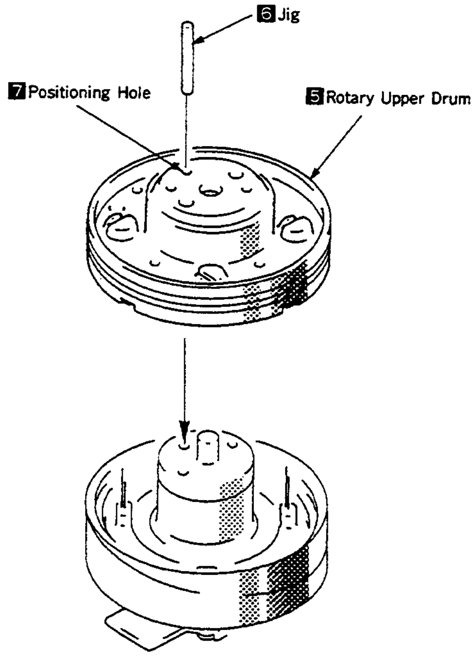


Fig. 31

3-22. ADJUSTMENT OF TENSION REGULATOR POSITION (Fig. 32)

1. Adjustment

1) Set a cassett tape and run the tape in the PB mode.
2) With the tape running, check that the distance from No.1 guide to No. 2 guide upper flange is 4.2 mm.
3) If they are not at the specified positions, perform adjustment in step 4) and subsequent steps.
4) Loosen the screw ❶.
5) If No.1 guide is located inside the specified position, shift the string block toward the arrow Ⓐ using the FWD B.T. adjusting driver (Ref No. J-15). Or, if it is located outside, shift toward the arrow Ⓑ.
6) Tighten the screw ❶.

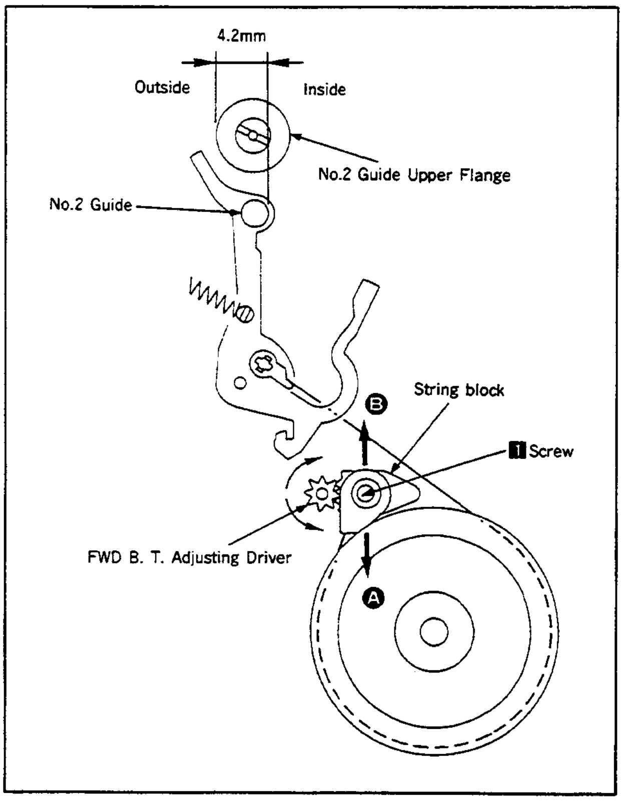

4.2mm
Outside
Inside
No.2 Guide Upper Flange
No.2 Guide
String block
Ⓑ
❶ Screw
FWD B. T. Adjusting Driver
Ⓐ

Fig. 32

3-23. FWD BACK TENSION ADJUSTMENT (Fig.33)

1) Select the TEST mode 1 using the adjusting remote controller (Ref No. J-17).
2) Set the torque cassette (Ref No.J-10).
3) Select the FWD mode, and check that the torque of S reel table is 8.5 ~ 11.5 g · cm.
If it is out of standard, adjust the TG-1 spring hook position using the FWD B.T. adjusting driver (Ref No. J-15).

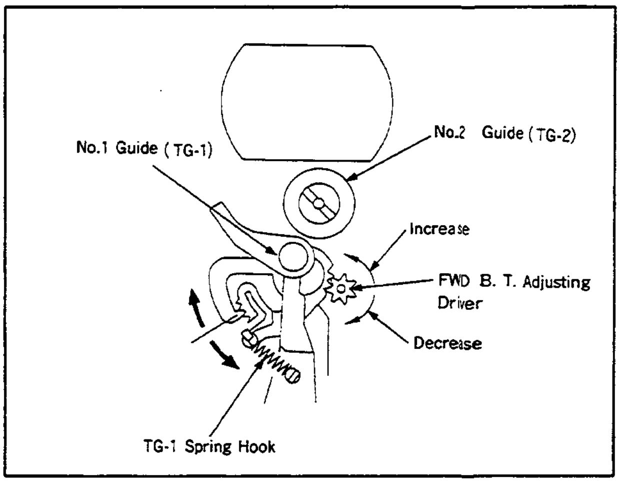

No.1 Guide (TG-1)
No.2 Guide (TG-2)
Increase
FWD B. T. Adjusting Driver
Decrease
TG-1 Spring Hook

Fig. 33

3-24. REEL TORQUE CHECK

1) Set the torque cassette.
2) Select the FWD mode, and check that the torque fluctuation center of T reel table is 7 ~ 17 g · cm
3) Select the REV mode, and check that the torque fluctuation center of S reel table is 25 ~ 39 g · cm.
4) Select the REV mode, and check that the torque of T reel table is 7 ~ 17 g · cm.
5) If the above data is not satisfied, the tension regulator band, T hard tab or T soft assembly will be faulty. Check them first, and if no abnormality is found, replace respective reel tables.

4. TAPE PATH ADJUSTMENT

The 8mm video system uses ATF (Automatic Track Finding) which instantaneously controls a tape running speed based on 4 types of pilot signals and performs high-precision tracking.
This does away a tracking control knob and allows accurate track tracing.
On the other hand, however, the ATF system has a problem in adjusting the tape path system. That is, if head tracing is out of order a little, the ATF automatically corrects it, which means that perfect adjustment cannot be done.
Therefore, in the A mechanism, the ATF system is forcibly operated to shift a tracking amount constantly (approx. 1/4) by setting the PATH mode with the adjusting remote controller (Ref No.J-16). So, fine tracking adjustment can be easily done. Also, the PATH mode setting varies with the model, and therefore, refer to the Service Manual.

Example) For CCD-FX410 series
Set the adjusting remote controller to the HOLD ON side.

1) Set PAGE : 1, ADDRESS : 00, DATA : 01 to cancel the PROTECT mode.
2) Set PAGE : D, ADDRESS : 01, DATA : 03 to select the PATH mode.

Note : Setting of PATH mode = TRACK SHIFT mode
If the adjusting remote controller (Ref No.J-16) is set to HOLD OFF once, then set to HOLD ON again after mode setting, the display of ADDRESS and DATA changes.

3) After adjustment is over, set DATA : 00, and press the PAUSE buttom on the adjusting remote controller (Ref No. J-16).

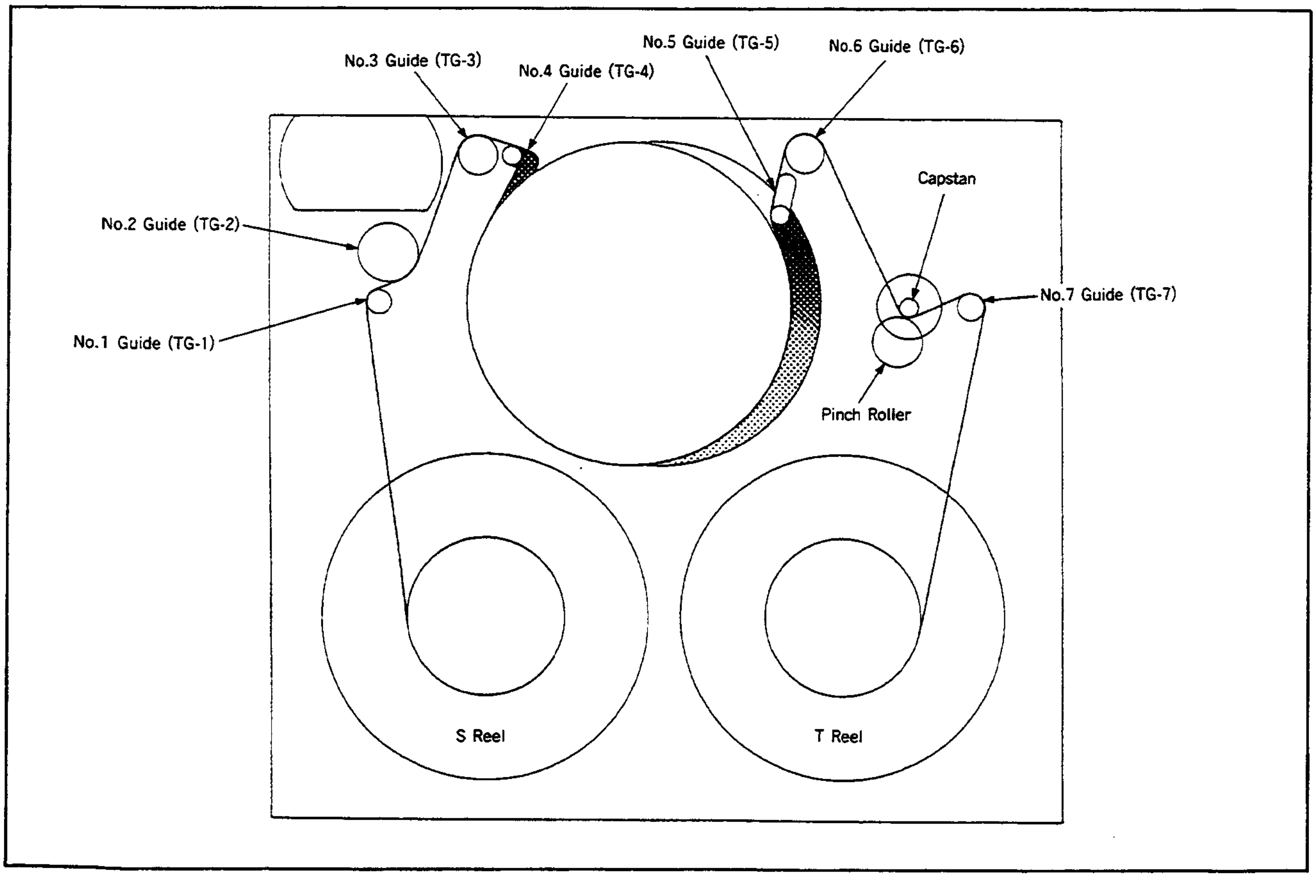


Fig. 34-A

[Note on Adjustment of No.7 Guide (TG-7)]

The height adjustment screw for No.7 guide (TG-7) is located at some distance from the guide (refer to Fig.41).

Therefore, when performing section 4-4. No.7 Guide (TG-7) Adjustment it is convenient to use the alignment tape for tracking (Ref. No. J-6), modified as follows, and perform adjustment in playback mode.

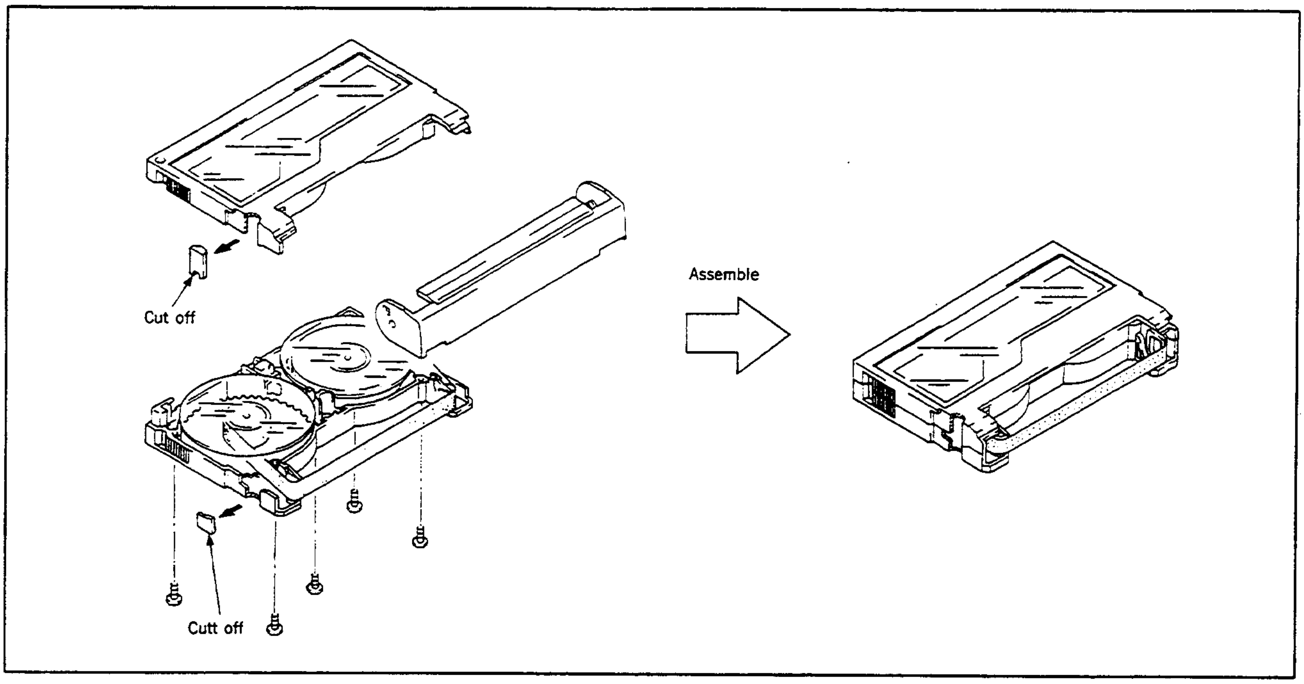


Fig. 34-B

4-1. PREPARATION FOR ADJUSTMENT

1) Clean the tape running surface (tape guides, drum, capstan shaft, pinch roller) (Fig. 34-A).
2) Set the PATH mode using the adjusting remote controller.
3) connect an oscilloscope to the check pin connector of the set.
   Example) For CCD-FX410 series
      CH1 : CN001 pin ③ (PB RF OUT) on CS-31 board
      CH2 : CN001 pin ④ (RF SWP) on CS-31 board
4) Play back a tracking alignment tape (NTSC : WR5-1N, or PAL : WR5-1C).
5) Check that a RF waveform is flat at the inlet and outlet of the oscilloscope (Fig. 35 ⓐ).
   If not flat, make adjustment with the procedures below.
   When the RF waveform is not flat at the inlet/outlet ; See Fig. 35 ⓑ and ⓒ.

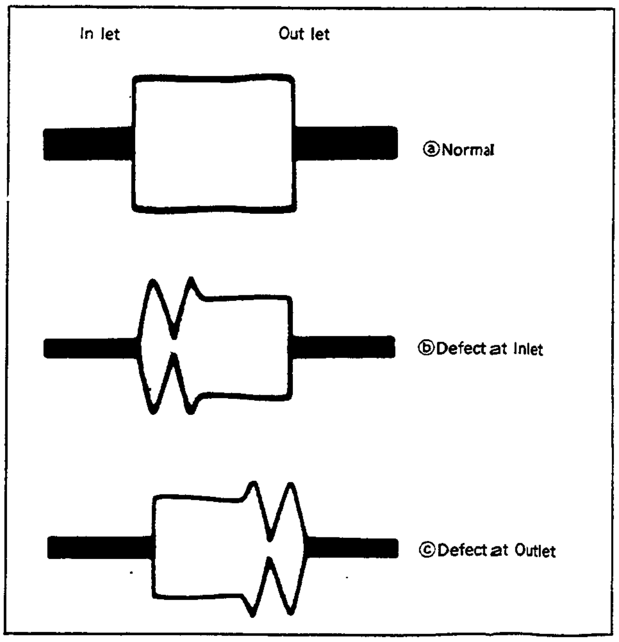


Fig. 35

4-2. TRACKING ADJUSTMENT (Fig. 36, 37)

1) Play back the tracking alignment tape.
2) Loosen the No.3 guide (TG-3) lock screw ❶ and turn the No.3 guide to flatten the waveform at the inlet.
3) Tighten the No.3 guide (TG-3) lock screw ❶ to lock the No.3 guide.
4) Loosen the No.6 guide (TG-6) lock screw ❷ and turn the No.6 guide to flatten the waveform at the outlet.
5) Tighten the No.6 guide (TG-6) lock screw ❷ to lock the No.6 guide. When this is done, make sure that the waveform does not change at the outlet.

Note : Be careful not to loosen the lock screw too much because the guide is easily moved.
: Take care not to allow interference between No.6 guide and drum when tightening the No.6 guide lock screw.

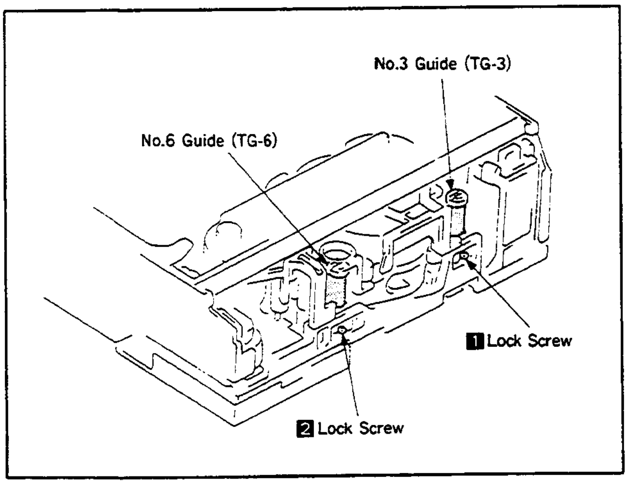


Fig. 36

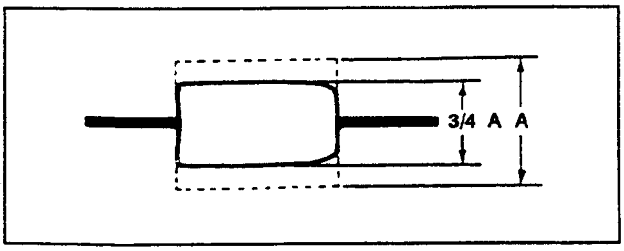


Fig. 37

4-3. No.2 GUIDE (TG-2) ADJUSTMENT

When the No.2 guide has been turned or replaced, perform height presetting before this adjustment.

4-3-1. No. 2 GUIDE (TG-2) HEIGHT PRESETTING (Fig. 38)

1) Rotating the TG-2 upper flange, adjust the height of bottom face of TG-2 lower flange from the top face of dowel on the mechanical chassis to 3.3 ± 0.05 mm.

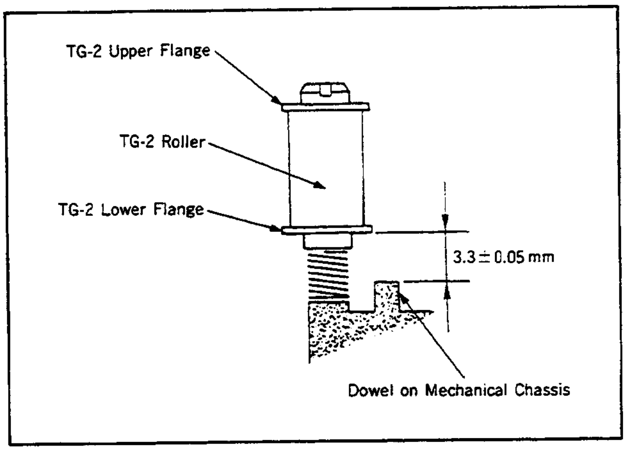


Fig. 38

[Reference]
This A mechanism is equipped with four adjustable guides (TG-2, 3, 6 and 7). To raise or lower the respective guide rotate the corresponding adjustment screw as shown below.

Guide	Guide adjustment	Rotating direction of adjustment screw
TG-2, 3, 6	Raise	Counterclockwise
	Lower	Clockwise
TG-7	Raise	Clockwise
	Lower	Counterclockwise

4-3-2. No. 2 GUIDE (TG-2) ADJUSTMENT (Fig. 39, 40)

1) Play back a thin tape like the P6-120MP, etc. and set the REV mode.
2) Confirm that the tape is not bent at the lower flange ❷ of the No.2 guide (TG-2) ❶ (Fig. 39). If it is, turn the upper flange ❸ of the No.2 guide (TG-2) clockwise with a screwdriver, lowering it until the tape is straightened.
3) Play back the alignment tape for tracking adjustment.
4) Perform tracking adjustment and trcking fine adjustment as described in sections 4-2.
5) In the track shift mode, CUE/REV the tape, then play it back and confirm that the RF waveform rises flat within 2 seconds.
6) If the waveform is not normal (Fig. 40), turn the upper flange ❸ of the No. 2 guide (TG-2) ❶ 90° counterclockwise and repeat step 5.

   Repeat steps 5) and 6) until a normal waveform is obtained.
   Then, confirm that the tracking waveform has not changed.
   If it has, perform fine adjustment of entrance side tracking and repeat step 5).

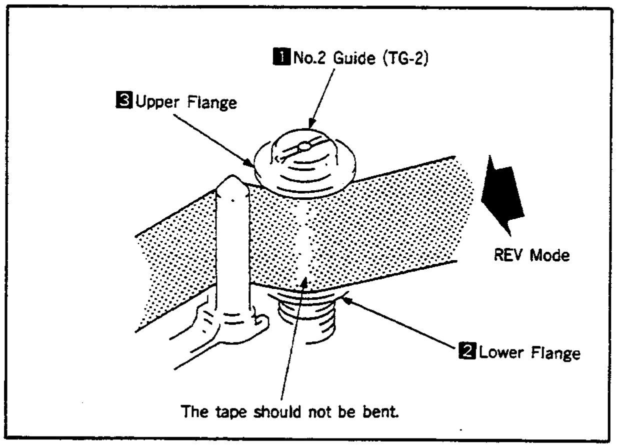


Fig. 39

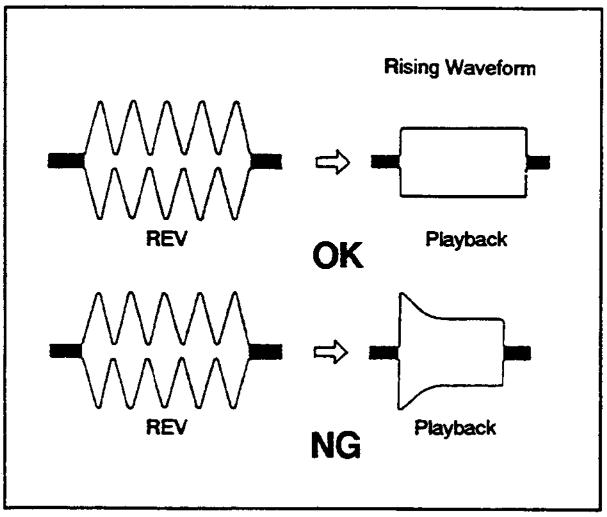


Fig. 40

4-4. No.7 GUIDE (TG-7) ADJUSTMENT (Fig. 41)

Note : This adjustment requires the No. 7 guide adjusting cassetetape (Fig. 34-B).

1) Play back the No.7 guide adjusting cassetetape and set the REV mode.
2) Confirm that the tape is not bent between the No.6 guide (TG-6) ❶ and the capstan ❷. If it is, turn the hight adjusting screw ❹ of the No.7 guide (TG-7) ❸ until the tape is straightened.
3) Set the playback mode again and confirm that the tape is not bent between the capstan ❷ and the hight adjusting screw ❹ of the No.7 guide (specification : 0.5mm or less). If the tape is bent beyond the specification, turn the No.7 guide (TG-7) ❸ until bending is within the specification (0.5mm).

   If in the REV mode tape bending between the No. 6 guide (TG-6) ❶ and the capstan ❷ is 0.3mm or less, adjustment can be considered completed.

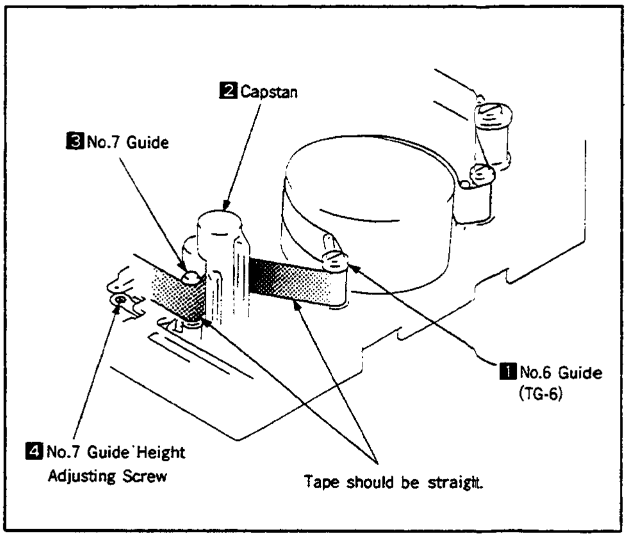


Fig. 41

4-5. CUE AND REV WAVEFORM CHECK (Fig. 42)

1) Play back the alignment tape for tracking adjustment and set the REV mode. Confirm that waveform peaks maintain a constant pitch of 5 seconds or more (Fig. 42). In case pitch is not constant, perform section 4-2.Tracking Fine Adjustment and section 4-4. No.7 Guide Adjustment.
2) Set the CUE mode. Confirm that waveform peaks still maintain a constant pitch of 5 seconds or more (Fig.42).
   Otherwise, perform section 4-2 Tracking Fine Adjustment.

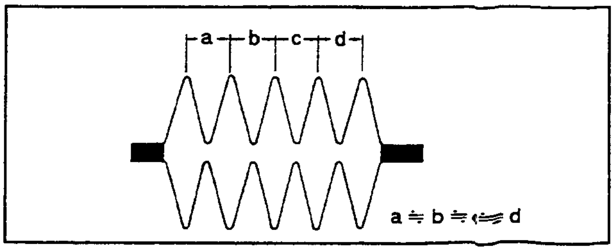


Fig. 42

4-6. CHECK AFTER ADJUSTMENT

4-6-1. TRACKING CHECK

1) Confirm that the amplitude of RF waveform is reduced to approx. 3/4 when the track shift mode is set (Fig. 43).
2) Then, confirm that the minimum amplitude value (EMIN) is 65 % of the maximum value (EMAX) or larger (Fig. 44).
3) Confirm that no large fluctuations occur on the waveform (Fig. 45).

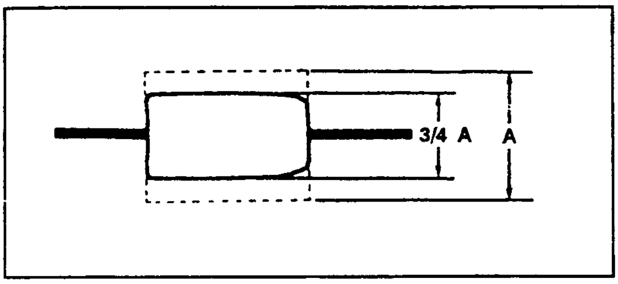
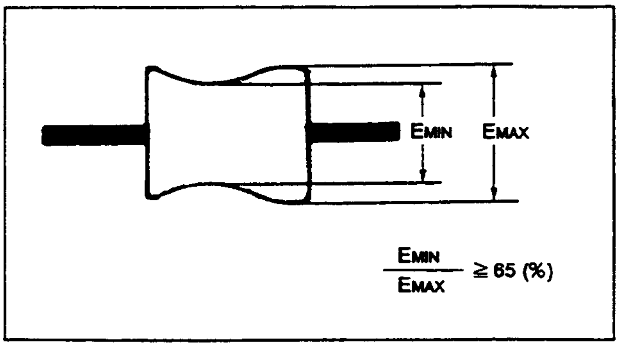
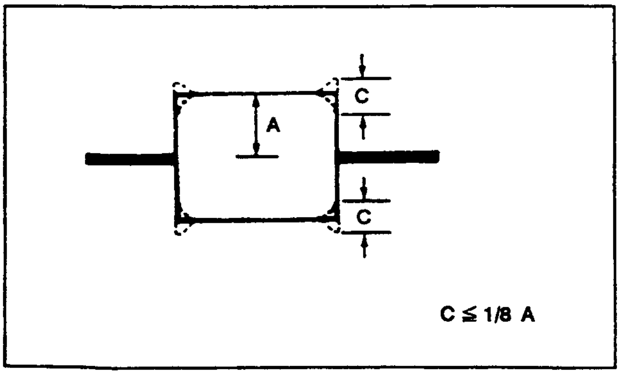


Fig. 43



$$\frac{E_{MIN}}{E_{MAX}} \geqq 65\ (\%)$$

Fig. 44



$C \leqq 1/8\ A$

Fig. 45

4-6-2. RISING CHECK (Fig. 46)

1) Play back the alignment tape for tracking adjustment.
2) Cancel the track shift mode.
3) Eject the tape, then load it again.
4) Set the playback mode and confirm that the RF wave form rises flat within 2 seconds. Also confirm that the tape is not bent around the pinch roller.
5) CUE/REV and FF/REW the tape, then play it back and confirm that the RF waveform rises flat within 2 seconds, Also confirm that the tape is not bent around the pinch roller.
6) Repeat steps 3) to 5) once more.

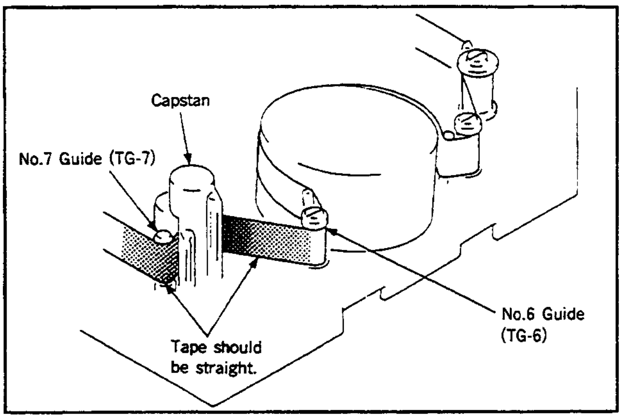

Capstan
No.7 Guide (TG-7)
No.6 Guide (TG-6)
Tape should be straight.

Fig. 46

4-6-3. TAPE PATH CHECK (Fig. 47)

1) Play back a thin tape like the P6-120MP (NTSC) or P5-90MP (PAL), etc. and confirm that no tape rising occurs, and that curling is less than 0.3mm, at the lower flange of the No. 2 guide , the upper flange of the No.3 guide, the upper flange of the No. 6 guide and the No.7 guide upper and lower flanges.
2) Confirm that no tape rising occurs and that curling is less than 0.3mm at the flange of all guide when pressing the FF button in the playback mode to set the CUE mode, or the REW button to set the REV mode.

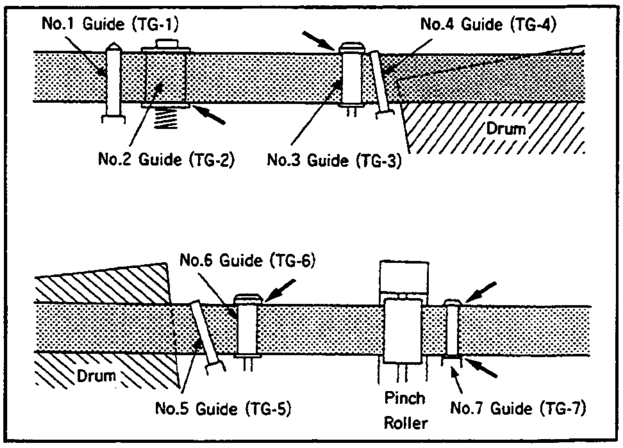

No.1 Guide (TG-1)
No.4 Guide (TG-4)
Drum
No.2 Guide (TG-2)
No.3 Guide (TG-3)
No.6 Guide (TG-6)
Drum
No.5 Guide (TG-5)
Pinch Roller
No.7 Guide (TG-7)

Fig. 47

8mm Video MECHANICAL ADJUSTMENT MANUAL IV

A MECHANISM

SUPPLIMENT-2

Video 8

〈Connection of Mode Selector IV Conversion Connector〉

In use of Mode selector IV conversion connector(J-6082-167-A), there are two different connecting methods depending on the model connected:

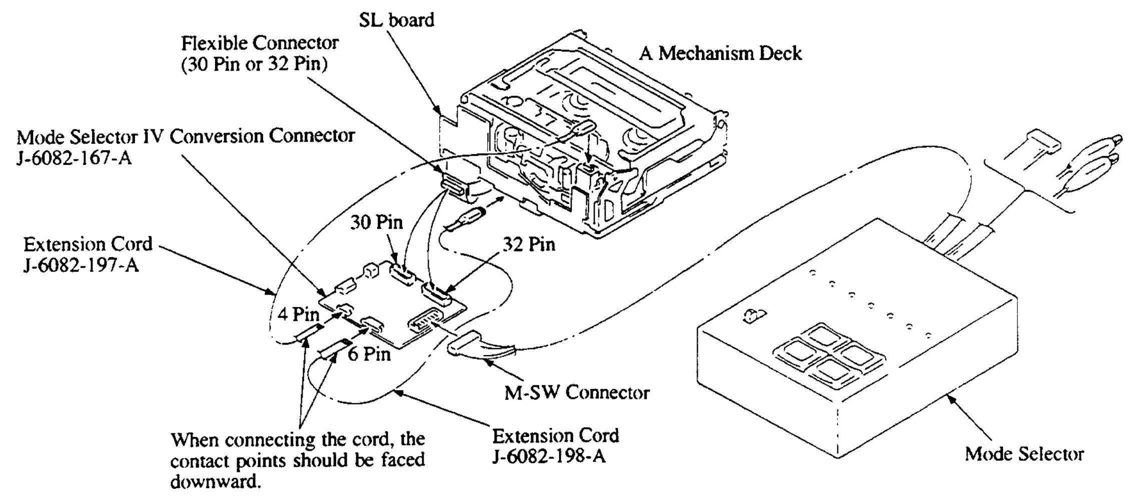
1. CCD-FX series

With the SL board mounted on mechanical deck, connect 30-pin(or 32-pin) connector to 30-pin(or 32-pin) Mode selector IV conversion connector.

(CCD-FX300 series, FX400 series. FX500 series
→ 30-pin connector (FP425 or FP600)
CCD-FX700 series → 32-pin connector (FP477))

2. Models other than above

Connect the extension cord(J-6082-197-A) to loading motor 4-pin connector and extension cord (J-6082-198-A) to mode switch 6-pin connector in mechanical deck, then connect the other end of cord to 4-pin and 6-pin connectors of Mode selector IV conversion connector respectively, as shown below.


SL board
Flexible Connector
(30 Pin or 32 Pin)
A Mechanism Deck
Mode Selector IV Conversion Connector
J-6082-167-A
30 Pin
Extension Cord
J-6082-197-A
32 Pin
4 Pin
6 Pin
M-SW Connector
When connecting the cord, the contact points should be faced downward.
Extension Cord
J-6082-198-A
Mode Selector

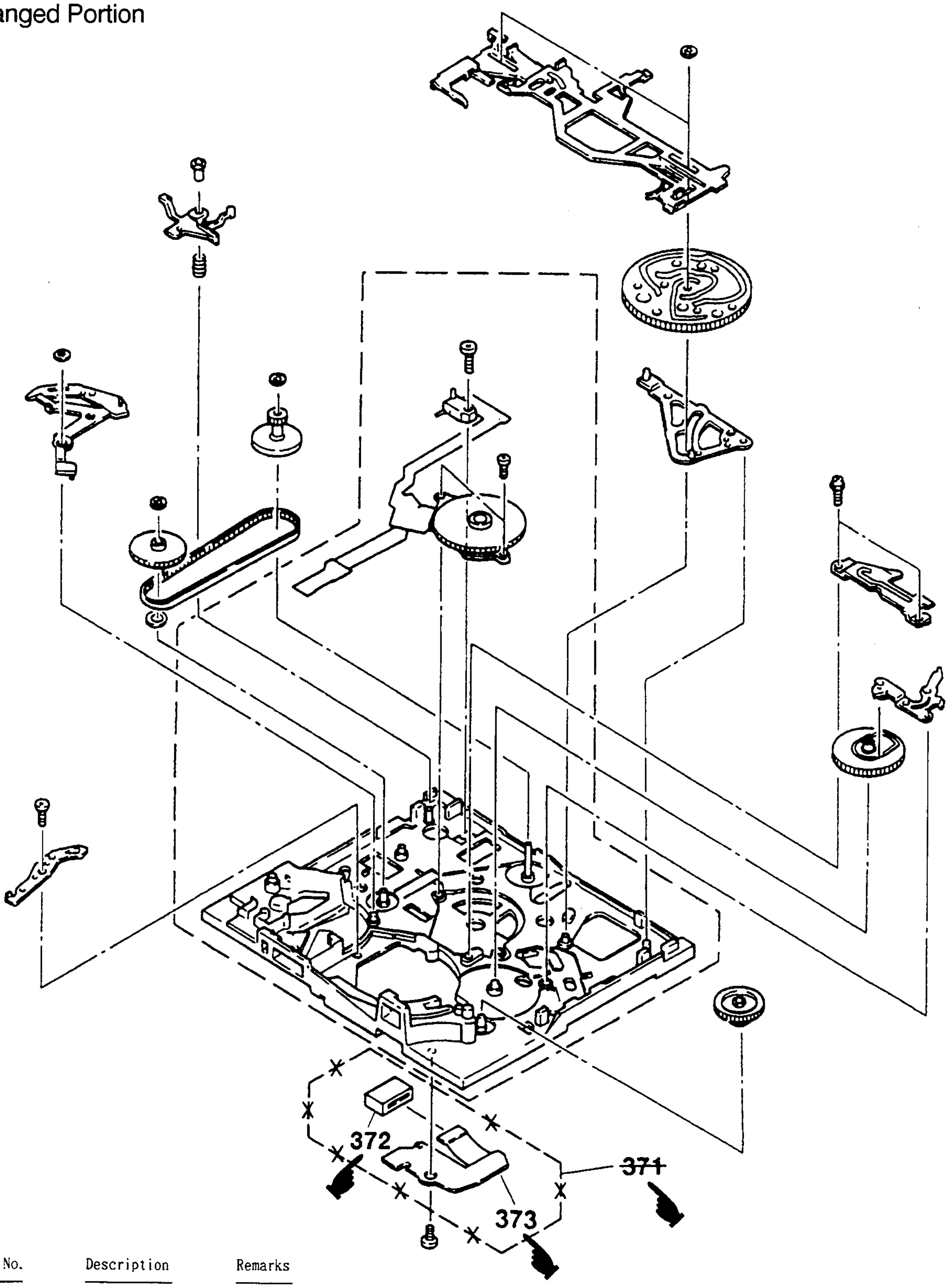
〈CORRECTION〉

P10. 2-4 Service jigs list

		Incorrect		Correct
J-15	FWD B.T adjusting driver	J-6082-182-A	➜	J-6082-187-A

MECHANISM CHASSIS ASSEMBLY (2)

☛ : Changed Portion



Ref.No.	Part No.	Description	Remarks
~~371~~	~~A-7040-311-A~~	~~FP-444 ASSY~~	☛
372	1-691-254-13	CONNECTOR, TRANSLATION 10P	☛
373	1-641-639-13	FP-442 FLEXIBLE BOARD	☛

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